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## ABSTRACT

A one-day hearing convened by the Senate Judiciary Committee examined the effort to meet the needs of children entering school who were exposed to drugs before their birth. Testimony focuses on the extent of the problem nationwide and on the need for early intervention strategies and special teacher training programs. Special note is taken of the problems that result from alcohol abuse, including fetal alcohol syndrome. It is estimated that the cost to prepare children affected by drug and alcohol abuse for school is \$20 billion. Statements from Senators Edward Kennedy, Christopher Dodd, Hank Brown, Joseph Biden, Strom Thurmond, and Charles Grassley are presented. Additional statements and testimony are provided by Judy Howard (University of California at Los Angeles), Evelyn Davis (Harlem Hospital Center, New York), and Diane Powell (Project Daisy, Washington, D.C.). Implications for the School Readiness Act of 1991, the pending Children of Substance Abusers bill, and the reauthorization of the Individuals with Disabilities Education Act are noted. (LB)

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# COCAINE KINDERGARTNERS: PREPARING FOR THE FIRST WAVE

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## HEARING

BEFORE THE

COMMITTEE ON THE JUDICIARY

UNITED STATES SENATE

ONE HUNDRED SECOND CONGRESS

FIRST SESSION

ON

THE IMPACT DRUG ABUSE IS HAVING UPON CHILDREN

MAY 16, 1991

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# **COCAINE KINDERGARTNERS: PREPARING FOR THE FIRST WAVE**

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**THURSDAY, MAY 16, 1991**

**U.S. SENATE,  
COMMITTEE ON THE JUDICIARY,  
Washington, DC.**

The committee met, pursuant to notice, at 10:42 a.m., in room SR-328A, Russell Senate Office Building, Hon. Joseph R. Biden, Jr. (chairman of the committee) presiding.

Present: Senators Biden, Kennedy, Specter, Brown, and Dodd (ex officio).

## **OPENING STATEMENT OF SENATOR KENNEDY**

Senator KENNEDY. We will come to order. The chairman of the Judiciary Committee is temporarily detained on the floor on a foreign policy matter and has asked if we would proceed.

We want to welcome our colleague and friend, the Senator from Connecticut, Senator Dodd, who is chairman of the children's coalition and has his own legislation dealing with the matter before the committee this morning.

Today, the Judiciary Committee addresses a critical aspect of the Nation's effort to combat drug abuse. Five years after the peak of the crack epidemic, thousands of cocaine children are entering school. These children, with their special needs, are as unprepared as their teachers.

Drug abuse in America is a continuing epidemic, but the youngest victims do not choose to become involved with drugs; it is their tragic inheritance. They are born to women who abuse drugs during pregnancy and who irresponsibly subject their children to prenatal addiction.

Once again, law enforcement cannot do the job alone. Treatment and prevention are essential. Incredibly, however, although there are a quarter of a million pregnant substance abusers in this country, only 30,000—1 in 8—receive treatment for their addiction.

As we debate the best way to spare tomorrow's children from the affliction of drug exposure, we must provide compassionate intervention today for the children that we have not protected. Each year, large numbers of women use drugs during pregnancy and many of their infants suffer the consequences of exposure. Cocaine babies are susceptible to heart disease, low birth weight, and seizures. A related condition, fetal alcohol syndrome, is one of the leading causes of mental retardation and other developmental disabilities.

(1)

The tragedies of these children become especially obvious when they reach school age. Drug-exposed infants are difficult to manage in their classroom because of their short attention spans and hyperactivity. They require special attention and, in some cases, formal placement in a special education program.

But as our witnesses today will tell us, these children are not a lost generation. Their future has hope. With preschool programs such as therapeutic nurseries, drug-exposed children can benefit from education and can even thrive in school, despite the obstacles they face. The key to success is outreach and early intervention. The challenge is to find these children in the community at an early age and intervene effectively to prepare them to enter school.

At the same time, we must train teachers to work with these children. Special education teachers receive individualized training, but many drug-exposed children do not need special education and will be placed in mainstream classrooms. All teachers should be sensitized to the needs of these children.

This hearing illuminates one important aspect of school readiness. The issue has many dimensions that we have scarcely begun to address. The Labor Committee is currently considering S. 911, the School Readiness Act of 1991. That comprehensive bill would make Head Start available to all eligible children and provide early prenatal health care, substance abuse treatment services, and timely immunizations. The committee will also consider Senator Dodd's Children of Substance Abusers bill, and we will reauthorize key provisions of the Individuals With Disabilities Education Act.

The plight of crack babies presents unique policy questions and is compelling in its own right. I commend Chairman Biden for his leadership on many aspects of our antidrug-abuse strategy and for bringing the topic of drug-exposed children before the Judiciary Committee today. I look forward to the witnesses.

Finally, I would just say one of the most enterprising programs that I have had the opportunity to see is the one-stop shopping program for expectant mothers in Boston City Hospital. They treat the expectant mother during the time of pregnancy after the time where the fetus has been exposed to substance abuse, and then afterward, and maintain the relationship with the mother during the recovery period and through the first few years of life. It has been a pilot program and had a dramatic impact on these unfortunate children, as well as the women themselves.

I would be glad to recognize Senator Dodd for any comments he would like to make.

#### OPENING STATEMENT OF SENATOR DODD

Senator Dodd. Thank you very much, Mr. Chairman. I am delighted to be able to come over here this morning, and I would ask unanimous consent that a prepared statement be included in this particular record.

I also want to commend Senator Biden for focusing attention on this question, although I would mention as well the fact that you wear two hats, not only as a member of this committee but as chairman of the Labor Committee, which also has a great interest in this issue. We have spent the last couple of years working on a

lot of aspects of this problem and, in fact, have held several hearings on this question.

I spent almost a whole day at the Metropolitan Hospital in New York, which is just on the edge of Spanish Harlem, where about 40 percent of all births in that hospital are in the pediatric intensive care unit. The assumption is that a great percentage of those children have been exposed to cocaine or other drugs.

The cost, we are told, is something in the neighborhood of \$20,000 to \$40,000 before that infant leaves the ICU unit, and because of the relative newness of crack, we are learning more and more now as each year goes on. The reports are now indicating what they have discovered in that hospital is, of course, that the average number of extended stays for a child after they come out of the ICU unit, before the age of 2, is five, which gets the cost to around \$100,000 per infant. And now we are learning about neurological problems beyond the age of 2, and so forth, that are showing up in our school systems. So this is a staggering difficulty.

Just to share some statistics briefly with the committee to give you an idea, in New Haven, CT, which now has the highest infant mortality rate of any city of its size in the country, in the midst of a State that has the highest per capita income, by the way, in the country, 49 percent of a survey of children born at a low-income clinic had been exposed to cocaine.

It is estimated that by next year, fully a third of all children who will enter kindergarten in the New Haven school system will have parents who have been substance abusers during pregnancy. There are 6,000 children in foster care in the New Haven area; 2,000 of them are crack babies now.

People who, in the past, took on the responsibility of foster care, and do a magnificent job in most instances, cannot cope with these children. They are turning them back within 2 and 3 weeks because the difficulties of just the emotional bonding, and so forth, that goes on in a normal foster care situation, as difficult as that is, is beyond the ability of people even who have been foster parents for some years to deal with these problems.

So you get some sort of an idea of the explosion of the problem. We had testimony, Mr. Chairman, you will recall, a few weeks ago with Judge Robert Zampano, a Federal district court judge in New Haven who was responsible for reaching the decision in a lawsuit that had been brought against the Department of Children and Youth Services in Connecticut. His language—and I have known Judge Zampano for many, many years; he is not a person to engage in hyperbole. But talking about this situation in the New Haven area, he says it is explosive just in that city alone in what is occurring.

So in this morning's hearing you are going to hear excellent testimony from Dr. Howard and others that will talk about what needs to be done. I would note your point you made at the outset—you can't criminalize the parent's behavior in this area. I think all of us feel that sense of anger that anyone who would jeopardize an infant during pregnancy—there is a sense that you would like to strike back, I suppose.

But frankly, as tempting as that option may be, it would probably be the worst thing we could do in terms of attracting other



people to come in for treatment, to try and convince them that they can straighten out their lives and avoid the contamination that occurs with future pregnancies.

You mentioned gracefully the COSA legislation—I appreciate that—the legislation we have been working on in the committee. There are a lot of aspects to it to provide therapeutic assistance and treatment, and so forth—a range of comprehensive services such as those you have talked about at the Boston hospital.

But maybe the most important aspect of that legislation is the \$50 million in grants that will allow for home visiting. One of the things we have learned with programs around the country that have been started at the local level is that if you can catch the problem before it becomes one if you can actually get people to go in to those at-risk families and begin to impress upon them the basic parenting skills, fundamental to which is you don't abuse yourself during pregnancy because you not only jeopardize your own well-being but, of course, that of your child—that is maybe the most important aspect of that legislation.

And again, I would emphasize that there are a lot of good ideas that are being tried across this country. We are just merely trying to take some of those ideas and put them into some sort of legislative form so some dollars could be available to the States and communities across this country.

So I am pleased, as I said earlier, that this hearing is being held here. The estimated cost of \$20 billion just to prepare children for kindergarten, which is the estimated cost now as a result of crack—that grouping of 0 to 5—that is the bill we are going to be paying. That is the estimated bill, \$20 billion, and that is today. And if this problem continues to grow, of course, that number could even get higher.

Last, one point I would make, Mr. Chairman, because I feel we pay a lot of attention to the drugs, to the cocaine issues, to the crack issues—but what needs to be focused on is substance abuse, and substance abuse includes alcohol. We have staggering problems on some of our Indian reservations in this country with fetal alcohol syndrome, which is a major, major problem, and we lose an awful lot of people every year in this country because of that particular issue.

Too often when we talk about substance abuse, we focus on cocaine and we focus on crack. As deleterious as they are, obviously, based on the statistics, we know that substance abuse is the problem, and it goes beyond just crack and cocaine.

So I thank you for allowing me to come by this morning to share a few thoughts on this, and I am anxious to hear some of the testimony here this morning.

[The prepared statement of Senator Dodd follows:]



STATEMENT OF SENATOR CHRISTOPHER J. DODD  
 COMMITTEE ON THE JUDICIARY HEARING ON  
 "COCAINE KINDERGARTNERS: PREPARING FOR THE FIRST WAVE"  
 May 16, 1991

Mr. Chairman, I appreciate the opportunity to join you today as you examine a critically important issue--the effects of alcohol and other drugs on children. For several years, the Subcommittee on Children, Family, Drugs, and Alcoholism, which I chair, has focused on these effects, not only on children exposed to alcohol and other drugs before birth, but also on children growing up in homes where parental substance abuse is present.

Few areas of the country have totally escaped the problems of parental substance abuse. In my own state of Connecticut, a study at Yale-New Haven Hospital found that 49 percent of women giving birth in the low-income clinic had used cocaine. So far, the child welfare system has been the primary institution responding to children of substance abusers. In Connecticut, parental substance abuse is a factor in two-thirds of the most serious abuse and neglect cases. Nationally, the number of children in foster care has increased 30 percent since 1986.

Without a doubt, our schools also will have to cope with the effects of parental substance abuse. The New Haven School Superintendent estimates that by next year, one-third of all kindergartners in the city will have been exposed to drugs before birth. In reauthorizing the Head Start program last year, I heard repeatedly that substance abuse is a major problem faced by families in the program.

And yet, we are only beginning to learn what the future holds for children exposed to cocaine before birth. There are few systematic studies of cocaine's developmental effects. Judy Howard, who will discuss her research here this morning, and others have found developmental deficits in the children observed. It is difficult to separate the effects of poverty and the parent's lack of availability from the drug's effect. We do know that the costs to society could be great. Based on a recent study by the HHS Inspector General, we estimate that it will cost \$20 billion to prepare for school the cocaine-exposed children born in one year.

The best strategy for minimizing the effects on schools is to respond to the children and their families as early as possible. That response must reject punitive approaches toward the mother. The plight of these children draws from us many emotions, from deepest pity to sharpest anger. I strongly believe, however, that our success in responding to the problem of parental substance abuse will be measured more by our compassion than by our condemnation.

Accordingly, I have introduced the "Children of Substance Abusers", or COSA, legislation, which is based on the premise that early intervention can give these children and families hope. I have been joined in this effort by several members of this Committee-- Senator Kennedy, Senator DeConcini, and Senator Metzenbaum--and I greatly appreciate their support.

The heart of the bill is the COSA grant program, which would provide \$100 million for comprehensive services for children and families. While parents receive extensive services, the children are the key to the program's approach. The legislation ensures that all children whose parents abuse alcohol or other drugs may enter the program, receiving a thorough assessment and a range of services. Drug-exposed children could receive therapeutic care, but perhaps most important is the program's ability to provide continuity of services as the children grow beyond infancy.

It is not enough, however, to react to the problems facing families when they have reached a critical point. Therefore, the COSA legislation includes \$50 million in grants for home visiting services, an early intervention approach repeatedly shown to be effective. The COSA home visiting program would fund a variety of models so that this basic, common-sense service can be offered by providers ranging from hospitals to child welfare agencies.

Mr. Chairman, we have talked about the effects of substance abuse on children literally for years. We are watching drug-exposed children grow up right before our eyes while we debate how we should respond to them. I believe we have to act now to prevent parents from using drugs, to expand treatment appropriate for women, and, above all, to ensure that we do not, indeed, lose a generation of children. I believe the COSA bill is part of the solution, and I hope my colleagues will support it.

Senator KENNEDY. Senator Brown.

### OPENING STATEMENT OF SENATOR BROWN

Senator BROWN. Mr. Chairman, I commend you for your focus on this most tragic of all problems, and am delighted to join you. I am looking forward to hearing the testimony that we will have this morning.

Senator KENNEDY. OK. I will ask the three witnesses if they would all be good enough to come up in a panel. Dr. Judy Howard is currently a professor of clinical pediatrics, University of California at Los Angeles, as well as head of the pediatric clinic providing medical evaluations and developmental assessments for infants. From 1982 to 1989, she served as medical director of the UCLA child abuse neglect team. For the past 14 years, she has directed the UCLA Intervention Program for Handicapped Children.

Dr. Evelyn Davis is a child development specialist and a clinical professor of pediatrics at the Harlem Hospital Center in New York City. In addition to her clinical research on the effects of crack cocaine on the fetus and the developing child, Dr. Davis has implemented an innovative program to foster the healthy development of children exposed to cocaine.

Dr. Diane Powell is currently director of the District of Columbia's Project DAISY, an innovative program targeting the needs of children exposed to cocaine. While Dr. Powell has served the schools of the District and Montgomery County as a special education teacher for the past 17 years, she has focused on the needs of drug-exposed children for the past 2 years. Dr. Powell's Ph.D. is in the field of learning disabilities.

We are delighted to have you all. We will start off with Dr. Howard. She has come the longest way.

**STATEMENTS OF A PANEL CONSISTING OF JUDY HOWARD, PROFESSOR OF CLINICAL PEDIATRICS, UNIVERSITY OF CALIFORNIA AT LOS ANGELES, LOS ANGELES, CA; EVELYN DAVIS, CHILD DEVELOPMENT SPECIALIST AND CLINICAL PROFESSOR OF PEDIATRICS, HARLEM HOSPITAL CENTER, NEW YORK, NY; AND DIANE POWELL, DIRECTOR, PROJECT DAISY, WASHINGTON, DC**

Dr. HOWARD. Thank you for the invitation to come and talk about this issue to this important committee. I am really thrilled—or I am so impressed with the knowledge that you all have about this issue.

In 1982, when I began to work with these children and their families, I literally had to shift gears. I had had many years of subspecialty training in child development, and I had worked for 14 years as head of a program for children who were developmentally disabled and whose parents were not substance abusers.

When I began to work with these families, I realized I had to hire other staff that had background knowledge because I think the point that you have each just made about the feelings that you have when you begin to deal with this issue that is so important and so out of control—you do need to have some kind of in-service training for yourself to understand what addiction is. And I think

once you begin to understand that addiction is something that is a chronic, relapsing disease, you then can—at least from the medical angle, you can approach it.

So gathering new staff around me in public health nursing, social work, people who were used to working in the children's protective services, I felt I was able to build a team to begin to develop projects that would adequately and appropriately serve the families.

What you are going to see today are a couple of children on videotape, and this was pretty sophisticated thinking, I think, back in those days. We took from the leaders in the country in the seventies who were doing research on babies who were exposed to heroin and methadone. And they were saying the same things that we were finding, and that is the babies are born a little smaller, pre-term deliveries are up. But one thing that you note is that the children, as they grow and approach 24 months of age, fall within the normal range of development. Yet, they are different.

I would like to just quote from a National Institute on Drug Abuse monograph that was published in 1976. Dr. Ann Lodge said the play of toddlers in her sample of heroin and methadone exposure was characterized by mouthing and banging, appeared immature. Goal directiveness and persistence were lacking, and the children had increased activity levels and were very sensitive to sensory stimulation.

When I read that and I began to think about what I was seeing clinically in these children, I asked our research developmental psychologist to try to quantify for that, and so we chose what you are going to see today, a little vignette.

In a laboratory setting within our clinic, we brought the children in, and I will tell you in a minute what all of them had experienced prior to being brought in. We wanted to capture, if we could, what these children did in a setting in which no adult interfered with them. They were just given toys that all children like to play with, and what would they do with these toys? And you don't score the children negatively if they don't do anything. It is just when they do something, they get credit.

Now, these children were parts of projects that were funded by the U.S. Department of Education and NIDA. Now, the two children on the videotape, plus all of them in the study, were followed from birth. All were from disadvantaged families; all received ongoing health care. None had serious diseases. All received home-based services. We had public health nurses going out, social workers, and early childhood educators. All were transported to our center to help with their health care and for the lab visits.

What I would like to do is start it, and the first little girl you are going to see is a preterm little girl who weighed 3 pounds. She was on ventilator. She was not prenatally drug exposed. Her mother is sitting in the background and has been asked to not interfere.

[Videotape shown.]

Dr. HOWARD. What Maria is doing now is she is taking some toys that were placed around her in an organized fashion and she is organizing them the way she wants to. It is interesting about Maria; she lives in a tiny, tiny apartment with her parents and her brothers and sisters. And she has always carved out a corner of the

apartment for her play area, so she organizes her own play area and has since she was 6 months of age.

Now, she is busy bringing—there is the telephone, there are the pots and the pans. What we do in this play test is we give children just the items that they play with, and pretend play comes in. Children all like to pretend to play a baby doll or do a tea party, put a baby night-night. We have taken for granted, I think, in the past that maybe this is just part of what children do and it doesn't have much meaning.

She is quite organized, too, about how she is very purposeful in placing the chair, careful about how she gets on top of the chair to approach her play. She checks with her mother—very important. Toddlers, you know, are quite independent. I think we can compare toddlers and adolescents; they are very similar. They want to check in, but they want their independence.

Now, she is getting into the theme of going to be playing with the pots and the pans. Now, she completes it; she wants to put an item away and put the top on it, but the stirring, and children at this age imitate what they see going on around them. Her affect and her enjoyment of the play is really noticeable. She decides to pick up another spoon. Maybe one spoon isn't good enough; they go for another one. Now, she has got another idea. She goes down to the other end of the table and gets the coffee pot and she is pouring coffee.

Now, just imagine watching this little girl in a child care program or a preschool, and it would be quite easy to see how she is guiding the teacher in terms of what her interests are and what she wants to do. She tastes what she is making. Attention span is nice and long, and now she is finished and she checks with her mother.

The next is on a little boy who was born full-term. Now, she was born preterm. He had exposure, at least, we know, to cocaine and some alcohol. What I am reporting to you today—I only work with parents who are heavy drug users. I do not know anything about children who have been exposed to parents who consider themselves recreational users.

Now, this is a little boy who is the same age. He has lived with the same family. That is his mother in the background. He lives with his maternal grandmother and aunt. He has a normal intelligence. I had tested him; he is not retarded, nor was Maria. They had similar development abilities when we used the standardized test in a structured setting, but when we put them before the toys we saw different things emerge.

He looks like he is going to go and get something, but he doesn't. He is somewhat stymied about what is his plan here. One of my colleagues is sitting there scoring, so he is looking up to her. So she is interpreting that maybe he wanted her to help him get the spoon, which he is doing.

Not infrequently, we had seen children that had been exposed to drugs who have an idea. They seem to go for it and then they stop and they don't follow through on the task. He is interested in the toys, but will he begin to develop a theme with the toys? Will he begin to, for instance, hold the baby, feed the baby, or will he begin to turn the music on on the music box or pretend it is a truck and



make truck noises? These are all the things kids do. Throwing is not abnormal. He looked up to his mother. He would get a score for socially interacting with her.

We wanted to show you a little bit more. We do an attachment test as well, and I will talk about that in a minute, but with a stranger in the room—this is a standardized test developed by Mary Ainsworth. His mother is out in the hall; he is not upset. He continues to sort of throw the little radio, so she wants to begin to move in and show him. What her plan is is to help him expand what he is doing, get rid of this just tossing the item and interact with the item.

You know, when we hear terms that these children are hyperactive or they have short attention spans, this is what teachers are talking about. Now, he will attend as she has moved in and pay attention to it. You can't see in this videotape very well, but this little boy's facial affect remains quite unanimated. He doesn't have a lot of joyful expressions. Yet, I can tell you when I played with him he did, but when he is just off on his own—this is Maria again.

The kind of language interaction that goes on—this is sort of the end of the videotape. When we looked at the group of children that had been exposed to drugs prenatally and we compared them with the preterm children, what we found was the children like Maria had about 15 times when they would interact with the toys in a meaningful way, whereas our children exposed prenatally to drugs, it was just 5 times.

What we wanted to get from this was how could we then help with our home intervenors, our early childhood educators, to begin to move in and really begin to help these children expand their play. The reason for this is very simple. You know, we are wanting these children to grow up and be productive citizens, and if they are showing some hesitancy toward getting involved in an activity, we have to stop and say: How can we help them; how can we get the joy out of beginning a task and completing a task.

Some of the behaviors that we have seen in the children, of course, have included the passivity. What does it mean, lack of interest? Are they bored that day? What is going on with them? They can be awkward and clumsy in their motor skills.

Emotional lability—we have seen some of these children who can be very joyful one moment if they are interacting with you, and then they can start to cry immediately and they don't go through a period of pouting or moving away from you. They don't like what you are doing, but they can show much emotional lability; delayed language, of course; aggressive behaviors; impulsivity. You are not quite sure what is going to happen and why.

And I think one of the most frustrating things to the children is something called sporadic mastery of tasks. On one day, they might be able to do something; for instance, putting a puzzle together. The next day, they can't.

In terms of what we are going to do with the early intervention programs—they are absolutely essential; we also need the home component. We need to have staff trained about substance abuse in families and how it affects families, what it means. We have to have staff that know who to turn to when we know that there are



problems in a family so that that agency can take over and help if they need to.

We have to know about normal child development because we can only help these children if we know what is normal and build their skills up to that level. We need small ratios. We need to help these children with transitions. They have a very difficult time moving from an activity and then suddenly there is a change, and it is very upsetting to them sometimes.

Helping with directions—I will give you an example of this. One of the children that I have followed for years who has been adopted and has been in a wonderful home—his father thought he was being very defiant as a 4½-year-old because he would not obey what was being said to him, and his mother and father were concerned because they didn't want him running too far from the home.

So when he was given directions verbally, he would ignore them and run around as if he didn't want to pay any attention to his parents. But when the parents took his hand gently and said you can't go beyond this mark in the sidewalk, he immediately obeyed; so some kinds of auditory processing with the children.

We also need stable staffs in working with these children, and that is why we are going to have to give them some sort of support because the children and the families respond to staff changes. You know, when you have addiction, you have suspicion there and you try to build up relationships with these families and you have to have a stable staff.

Now, in terms of the potential impact if we don't do something, I think the answer is more simple than we have thought of in the past. The most recent grant that we have funded by NIDA now is pretty similar to that one Senator Kennedy mentioned in Boston, and we are following women who are pregnant who are heavy drug users.

Over 65 percent of these women come from families where their parents were substance abusers or alcoholics as well. Over 65 percent of them were physically or sexually abused. Over 90 percent of them have dropped out of school. Over 75 percent of them come from situations where there is violence. So I think that if we don't get in early, I can't help but feel that these children who are part of these families might be repeating that cycle.

I will take questions later. Thank you.

The CHAIRMAN. Thank you very much, Dr. Howard, and let me apologize to everyone for being late. I was on the floor of the Senate making a statement. Also, before we go to Dr. Davis—and after you all speak, I have a brief statement to make.

But I want to thank Senator Kennedy, not for opening the hearing, but to point out that we are not unaware of the fact that the solutions that you are suggesting and looking to fall completely within the jurisdiction of the Labor Committee. Our interest in this began as it related to the attempt to try to get full funding for mothers who are using drugs and pregnant, and to get them into treatment facilities now, when, in fact, we only will get—even if we fund everything the President wants, only 17 out of 100 would be eligible to get in. And so I want to make it clear, and I again thank

Senator Kennedy for, in essence, allowing us to have this hearing in the committee, and I do appreciate it.

Dr. Davis, we are anxious to hear what you have to say.

### STATEMENT OF DR. EVELYN DAVIS

Dr. DAVIS. Good morning. I, too, am unbelievably delighted to be here. Let me say from the outset that I have a personal interest at stake. I live in Harlem, and I have lived in Harlem my entire life except for a period spent in the Peace Corps.

I can say that Harlem has always been a poor community with difficulties in families and with youngsters whose needs basically have not been met. But it wasn't until 1985 that I really began to see some changes that were startling, and my feeling is that if we are not willing to face the dangers that this difficulty right now poses, we really have to think of what is going to happen to this Nation as a whole.

Cocaine is a neurotoxin. Cocaine destroys families. Cocaine basically leads to children with all kinds of behavioral and developmental abnormalities which, indeed, may not show up at delivery.

Let me, in the interests of time, just give you some ideas as to what we have seen at Harlem in terms of developmental, behavioral, and growth abnormalities, and perhaps this will give us some understanding as to why the issues are critical in terms of education. Certainly, Dr. Powell will give us more information about how we can meet the needs in school.

Basically, Harlem is a large community with an underserved population, where many of our mothers, in addition to other people, are using a whole variety of substances. When we talk about cocaine use, we have to be aware of the fact that most of our mothers are polysubstance abusers and about 50 percent of them are using alcohol. So all of the problems we have heard of in regard to fetal alcohol syndrome we can think about in terms of the youngsters who are exposed to cocaine.

Not long ago, I looked at about 200 of the youngsters I have seen over the last 5 years who were exposed to cocaine in utero and I attempted to get some idea as to what categories of disabilities these youngsters might fall into, and I am just going to briefly go over some of our findings.

It is not generally known how important language development is to the overall development of a youngster, but if a youngster can't understand and can't speak, cannot get his ideas across, not only is he just going to be sitting off in a corner not communicating, but he is going to be thoroughly frustrated.

About 90 percent of the youngsters we see at Harlem exposed to cocaine have some element of language delaying, and that is not just expressive language delaying, but it is also receptive language delaying. Roughly 35 percent of our youngsters who are born exposed to cocaine have some degree of gross motor disability. Now, I am speaking of medical problems, but in the long run some of these will actually lead on into behavioral problems.

Gross motor delays mean that youngsters cannot sit, cannot walk, cannot run as they should. But in more subtle ways, these

are youngsters whom, when we see very early on, tend to be stiff, but later on grow up to have subtle signs of cerebral palsy.

About 44 percent of the youngsters I looked at were preterm deliveries; that is, they were born before 37 weeks. And I think Senator Dodd mentioned the expense of these youngsters having to stay in ICU's. It is an incredible picture to see 2- and 3-pound babies languishing in an ICU. Some of them are full-term and weigh only 4 pounds.

Many of our youngsters, in addition to being preterm, are showing signs that probably have significance for long-term development, and that is many of them have very small head sizes. We have about 35 percent of all of our youngsters exposed to cocaine who have head circumferences below the fifth percentile. Again, in the neurological field we say that if a person has a significantly small head, then he has a small brain, and if he has a small brain he does not develop normally.

Now, all of these issues I am talking about perhaps don't get educators excited. I think what gets educators excited are behavioral abnormalities and those kinds of disabilities that really interfere with a youngster performing well in school.

Hyperactivity and short attention spans, the two areas that Dr. Howard mentioned, are present in about 30 to 35 percent of these youngsters, and you really have to see them at work. If they have not been worked with at an early age, these youngsters are literally all over the place. They seem to be wound up with a motor. They can run back and forth, they can jump on the floor, they can run and bump into the wall. This is a terrible scenario, but in children who have not been worked with early on this is what we tend to see in about a third of these youngsters.

I think the most disturbing thing I have seen thus far has to do with the fact that about 8 to 10 percent of children exposed to cocaine and other drugs—again, we are talking about polysubstance abusers—are youngsters who have really peculiar behavior, language development, and social skills that place them in categories where they really cannot interact with other people in a normal way.

We have been seeing an incredible incidence of autistic disorder. Now, autism is a very rare developmental disability. I mean, we see it in about 7 to 10 live births per 10,000 live births, so it is a very rare disorder. We also know that autism is associated with about some 40-odd insults. We don't know what the cause of autism is, but certainly rubella—that is, German measles—or the elephant man syndrome, neurofibromatosis—these kinds of ailments have in the past been associated with autistic disorders. And as I said, there are tons of disorders that seem to be connected with autism.

At Harlem, about 5 years ago, I begin noticing an incredible increase in that disorder in the community, and it was until a couple of years ago when I began getting phone calls from foster care agencies and from some of the schools asking me whether or not I was seeing autism in connection with substance abuse, particularly crack, that I began to look into the issue.

I can say right now that we have a rate of about 10 percent of that referred population that falls under the DSM-3R criteria for autistic disorder. Am I saying that crack causes it? I don't know,

but certainly there seems to be some—it may be a precipitant. There may be a genetic predisposition for the disorder that is triggered by the crack. We just really don't know, but the association is there.

This year, since I am working very directly with the board of education in New York City, I was amazed to hear from them that over the last 2 years they have had almost a double increase in their rate of autistic disorder without any known cause. So there are issues that we have no answers for, but they are startling. I think they have major implications for the school system. If it is indeed true autism as opposed to, let us say, an autistic-like syndrome, we are talking about a disability that is a lifetime disability and we are talking about care needed to be provided for a lifetime. We have indeed also seen some children who appeared to have psychotic-like features without any explanation for it.

So I think we are talking about a drug that is neurotoxin, as well as a drug that destroys families, and if we don't begin to work early with the families and with the youngsters, we are going to be facing a tragedy.

Now, I know we were given a couple of questions that we were supposed to address. One had to do with what kind of preschool programs work. Well, before there were any preschool programs devoted to cocaine-affected children, there were always developmentally delayed programs around, and I think they are wonderful models for working with these children.

These programs have small class sizes. They have got a ratio of about three or four teachers per 10 youngsters. There is a very strong family orientation to the program, and I think all of these development schools have done wonderful jobs in the past.

I think with the whole issue of cocaine, we need to develop new models. No. 1, the primary caretaker is no longer the mother. About 40 percent of our youngsters are now being cared for by grandparents, and when I say grandparents I am talking about grandparents who are up to age 80. I have an 80-year-old grandparent who has a little baby in her home now. The majority of our grandparents are taking care of three or four youngsters. Many of them have ailments of their own. They are not able to really get out and engage with the schoolteachers and what have you.

And we are saying that unless the school system can understand these issues, we are missing the boat because you can't work with these youngsters without having something to do with the families also.

We also have to mention that, in addition to the grandparents being the major caretakers, that the mothers who are the drug users are still around. Many of them are out in the streets, but they are coming back and forth into the home, disturbing the home, upsetting the youngsters.

So a child may come into a classroom on any particular day and be totally discombobulated because he has seen his mother, whom he loves but who he knows cannot take care of him. And if the teacher is not able to really effectively deal with this, the youngster is going to be really left out there with his needs unmet.

Let me just end by saying that we at Harlem have developed a very nice, unique program through the auspices of money from the

mayor's office, Mayor Dinkins, and the board of education. We have joined with them to begin to service about 16 youngsters between the ages of 2 and 5 who were perinatally exposed to drugs, and our whole intent is to engage teachers in the community in trying to help them to understand what these youngsters are going to present with.

We have got District 5 teachers rotating through our therapeutic nursery on a weekly basis. They come for a series of actually 6 weeks, and then they go back to their schools and they take back to their schools what they have learned about intervention strategies and what have you.

We are also trying to get the neighborhood teachers to understand what we in the hospital already know, that you cannot isolate education from what goes on in the family. All preschool programs have to engage the family; there have to be home visits. I make home visits all the time. There have to be visits of the families into the classrooms. There has to be an understanding on the part of the community that these are not children of a lost generation.

Yes; I think a minority of these youngsters are doomed, and I think they are doomed because of brain disorder. I think that particular population I spoke about—the autistic youngster, the psychotic youngster—I really don't have a good prognosis for the majority of them.

But I think if we talk about the large majority of these youngsters having some future, my feeling is that they do. And if we don't recognize the need for early intervention, then we have really missed the boat. It is criminal to allow these youngsters to go to kindergarten without having someone work both with them and with their family in very special ways.

The CHAIRMAN. Dr. Davis, before we go to Dr. Powell, I held a hearing in New York City, I guess, 2 years ago, and the subject was we were looking at not this side of the issue; we were looking at the side of the issue that related to the law enforcement side and interdiction.

The head of the Department of Public Health for the city of New York wanted to testify, and he said—I would just like your comment on this. I found it the most startling thing I have ever heard in the hundreds of hearings I have held on the drug issue. Again, this is not my expertise, what we are talking about now; this is Senator Dodd's and Senator Kennedy's.

But he said we have seen the most startling change take place in New York City that I am more frightened about than anything about the drug issue I have ever seen. He said we have become accustomed, unfortunately, to matriarchal societies in many minority communities and they no longer exist. I looked at him and said, well, what has happened. He said now they are grandmother societies, and I don't know what is going to happen when they die.

Dr. DAVIS. Yes; it is true.

The CHAIRMAN. He said we are worried about situations that exist in countries like Brazil and other places, where there are large packs of youths literally with no supervision of any kind who literally roam the community, roam the countryside. And I thought it was the most frightening, chilling thing I have heard, and your



comment today about your dealing with grandmothers 80 years old with, you know, 6-month-old children, or whatever, in the household is just something I want to come back to. I want you to think about that because I want to talk a little bit about that with you later.

Dr. DAVIS. OK.

The CHAIRMAN. Dr. Powell.

### STATEMENT OF DR. DIANE POWELL

Dr. POWELL. Good morning, Senator Biden and members of the committee. I am also honored to be asked to represent the community of educators, and I would like to—

The CHAIRMAN. By the way, doctor, I notice you probably noticed two people get up and leave. It had nothing to do with your beginning to speak. Unfortunately, there is a joint session of the Congress now to listen to the Queen, but I felt this was so important, this subject, that I did not want to stop this hearing or postpone the hearing.

But others have specific responsibilities in the Senate that require them to be there at that function, and that is the only reason why anyone got up to leave. I could see the look on your face, like where are they going. But that is the only reason.

Senator DODD. Besides, Senator Biden is Irish. [Laughter.]

The CHAIRMAN. I must admit the thought of my grandfather Finnegan and my great grandfather Bluett, who was accused of being a Molly McGuire, had nothing to do with England, by the way. My curtailing a hearing on children to go to hear the Queen—I was not willing to run that risk.

Dr. Powell.

Dr. POWELL. OK. As you know, the first wave of babies born in the crack epidemic of the mid-1980's are not entering the school-house doors, and because this epidemic is a new phenomenon, we are all speculative regarding the long-range health and educational problems which many of these children will encounter.

In response to this tremendous concern, there are some programs which have been put in place in several of our major urban school systems, and some programs that are in the forefront in this effort include, here in Washington, DC, Project DAISY; the Savin School project in Los Angeles; the Florida Substance Abuse project; Project WIN in Boston; the Harlem Primary Prevention Program in New York; and, certainly, the efforts of Dr. Chasnoff in Chicago.

Although we don't know the long-range impacts of prenatal exposure on these children, we do know that these children are at risk and that they are going to need early intervention and support in order to receive maximum benefits within our educational systems.

We also know that many of these children will have had early bonding experiences which significantly differ from the norm due to their mother's use of drugs. Some of these experiences include foster care placement, the border babies syndrome, and multiple caretakers within their own family system or community during the first 5 years of life. As a result, we often are seeing children who exhibit marked deficiencies in their social competencies.

A common thread which runs through the aforementioned programs is the knowledge that these children are presenting observable behavioral characteristics which require support and early intervention. Some of the types of things that we are seeing in classrooms include short attention spans; excessive activity; limited task persistence; clumsiness; emotional lability, where we see mood swings where the children come in happy and 4 or 5 minutes later they are crying; low frustration tolerances; expressive and receptive language deficiencies; low self-esteem. These children don't feel good about themselves in many instances.

Often, we see children who have poor eye contact; very preverbal behaviors—they won't move from task to task; poor social interaction skills. Their thematic play doesn't look like what we expect children to do at that age. Their thematic play is based on themes that have to do with things that they see in their community, so they do play around things that look like drug busts and they use dolls and pretend that they are shooting up with the doll. And those sorts of things that you don't expect to see from a 3-, 4-, or a 5-year-old, we are seeing in our classrooms.

We also see children who have a heightened need for nurturance, and when they come into the classroom they want to get on the teacher's lap because they want that, they need that; they haven't had a chance to get that. We see children who are aggressive, and we see children who are not only aggressive toward their peers, but toward adults, and sometimes they turn that aggression inward toward themselves.

We also see children who don't know how to accept praise or affection from adults. They don't trust, they don't bond. We have also seen children who are having problems in the generalization of information across settings. So they know it in the classroom, but they don't know it outside of the classroom; they are not sure. We are seeing children who are having problems with accepting limits from adults, testing the limits in sometimes dangerous ways.

So we are seeing a lot of differences in our children, and this is certainly having an impact on how we are going to be able to respond to the needs in the classroom. In fact, because of the types of things that we are seeing with these children, we feel that universities are going to need to begin to deliver their teacher preparation programs across the country in a different manner.

The role of the regular education teacher is going to have to undergo a dramatic shift. It is going to be necessary for teachers to go beyond the confines of the classroom to work collaboratively across systems. This means that we are going to have to focus on a collaborative approach across agencies, pooling personnel resources, and sharing fiscal resources as we respond to the multiplicity of service needs that these children will have, and we are including medical, educational, and social service needs.

As it relates directly to what we are seeing in the classroom, we are going to have to develop specific intervention strategies to respond to the needs of this population, and in some of those programs that I mentioned we are in the process of doing that.

We are going to have to then reach out and train other service providers to use these strategies, and these strategies may include things that appear to be somewhat simplistic, like how do you use



a toy in a more effective way, or allowing a child to sit on your lap for a longer period of time, or hugging a child, positively reinforcing them, and always finding something to say to them that makes a difference. Or it may mean that we have to shape an environment. It may mean that an environment is too stimulating for a particular child, so we have to modify that and reconfigure the space that we have in our classrooms.

We also have to look at the types of curricula that we are using and offer developmentally appropriate curricula that allow children to explore the environment and to interact in terms of learning and not be passive learners.

We have to provide interdisciplinary team support, and that means that we have to bring to classrooms the support of speech pathologists, clinical psychologists, and social workers. We can't expect those families to reach out for that.

We also have to look at the whole issue of home-based intervention and recognize that that is critical in being successful with this population. We have to work closely with families and primary caregivers, and we have to empower them to work as advocates on behalf of these children. And we have to understand that when we define family, we must go beyond what the traditional definition is in terms of looking at a biological family, but we have to look at the person in the community, the friend, the neighbor, the grandmother, or whoever it is who is the primary caregiver for that child.

What is most important is that we become prepared to receive and service these children, and that we recognize that these children are children first. They are not just crack babies or the biologic underclass, as the media would often have us believe. These are young children at risk.

As educators, we have to really rethink the way in which we are going to deliver educational programs. As of yet, the jury is out and the verdict hasn't been rendered relative to the numbers of these children who will need supports beyond the regular classroom, but it is critical that we attempt to support and maintain these children in settings with their nonexposed peers to the highest degree possible.

This is not purely a special education issue. This is an issue of educating young children. It is not appropriate, nor is it financially feasible, to segregate these children from their peers. Instead, what we have to do is to train teachers to work with these children as they would any other at-risk child in their classroom.

This is an era of full inclusion, and only if the needs of these children are so severe that they need alternative settings should they be removed. Otherwise, we really must bring the supports directly to the child within the confines of the regular classroom.

We need to begin to understand what the ecological system of that child is. We know that the ecology consists of the community environment, the home environment and the school environment. So we have to educate ourselves and develop what Howard Shame calls educated foresight. We have to be aware of the differences in terms of educating these children.

Finally, what we can see from early attempts in responding to these children is that early intervention is making an impact, and

for many of these children the prognosis, with early supports, will be positive.

In closing, what I would like to do is to invite you, Senator Biden, and any members of your committee to visit Project DAISY here in Washington, DC, to have an opportunity to meet the staff and spend time with the children so that you can have a firsthand opportunity to see how important it is that we continue to support them now, and to see what the projects that we have implemented are doing and the difference that they can make for these children in the long range.

Thank you.

#### OPENING STATEMENT OF CHAIRMAN BIDEN

The CHAIRMAN. Thank you very much, Doctor.

With the permission of my friend from Connecticut, let me give you a very shortened version of what I was going to say to sort of set the rationale for my asking that these hearings take place in the first place.

I am not being solicitous when I suggest this. I know the three of you know this, that when we in the Congress, not just the Senate, look for answers and look for leadership in determining how to deal with the multiple problems our children in this society face, over the last at least 5 to 6 years we have looked to Senator Dodd, and I mean that sincerely.

Some of us, if we are good enough, get known for having a particular expertise, and using that expertise is enhanced by the extent to which the heart leads the head. And in the case of Senator Dodd, that is why we look to him, and it is not just Democrat and Republican; we all look to him.

And so I really am a little out of my field here, not out of my interest or concern, but out of my field, when I hear each of you talk about what we must do from this point on relative to intervening to help these children. That will obviously fall on Senator Dodd's plate and his leadership.

The reason for this hearing from this committee, which is an unusual committee for you all to testify before—and I have not, quite frankly, heard three more competent witnesses in the 18 years I have been here, nor more articulate.

I am looking for real early intervention, intervening in a way that we drastically diminish the number of crack babies, drug-addicted babies, alcohol-deformed babies, by intervening with the mother before the child is born. So, that is from whence my interest in this silly place and jurisdiction comes.

One of the things we always say up here, and I am sure you as professionals have said in pleading your case to the public interest to whatever charitable, professional or governmental organization you have gone before—I am sure we have all used the expression "this will save us a lot of money in the long run." I know what I am about to ask you costs a lot of money, but if you do it then society will not only be spared the social cost and the human tragedy will be diminished, but we will also save money in the long run.

We always, those of us involved in social concerns—at least I know I do it—always try to make that legitimate argument. But

sometimes it is difficult to paint it as I believe it can be so clearly, vividly painted with regard to this issue.

So I want to state from the outset to you and to my colleagues and to the press, I have a very simple, very straightforward and not very sophisticated aim to come out of what we are going to attempt to do in this committee this year, and that is, quite bluntly, attempt to embarrass the President and the Congress, Democrats, Republicans, into understanding that it is shameful that right now fewer than 10 out of 100 women who have a drug addiction and who are pregnant, over one-half of whom probably are seeking help—they have raised their hands, they have signed a piece of paper, they have said I want to get into a treatment facility, and we have none for them.

This notion that we are making progress, this notion that we all pay homage to the writhing crack baby we show in the hospital—and Presidents go and pick them up and everybody goes and looks, and literally the American public cries when they see it. I think we should take the blinders off and expose the public to the naked fact that we are not doing—I won't say a darn thing—we are doing very little, very little.

So I just want to say right up front, in the past 3 years I am no longer strident; I am very calm, I am a man of great wisdom and I have become more subtle. But I think it is shameful, and I think not enough people understand the connection.

Dr. Davis, as a true professional, you indicated you could not say with absolute certainty that autism is directly related to or created by or a consequence of, but we know certainly coincidental things have occurred. I know for certain—I can document for you when it happened—when each of the crack epidemics and crack waves hit each of the major cities in our country, in our society, and I have prepared a few charts here to illustrate how serious the problem has become.

Our first two charts show the following. In two of the cities first hit by crack cocaine, Miami and Los Angeles—and, again, we can go back and tell you almost the day the first dealer sold the first bit of crack cocaine. In two of those cities first hit, Miami and Los Angeles, the number of 3- to 5-year-olds in special education has doubled since 1986.

And, coincidentally, what we are talking about—the irony everybody should keep in mind here is, as that old expression goes, we ain't seen nothing yet. We are just seeing the beginning of the problem because we are now only getting into the school system and the preschool system those children who come from this circumstance. Crack was not in Harlem in 1976. Heroin was rampant; crack was not. So we know when the crack epidemic in this country started, and in the various cities.

So in the first chart, as I indicated, the number of 3- to 5-year-olds in special education has doubled since 1986 when the epidemic began. In New York City, the last year alone saw a 26-percent increase in the number of 3- to 5-year-olds in special education programs.

Now, in cities of every size and in every region of the country, we are suffering these huge increases. Columbus, Nashville, El Paso,

Seattle, all saw an explosion in the number of young children needing special education in the years since the spread of crack cocaine.

The costs of these children's suffering, of course, cannot be measured in mere dollars, as the three of you have spoken so graphically and movingly about today. However, as can be seen from the third chart, the annual cost in special education services required by one child runs as high as \$16,700—three to four times the cost of educating in a regular classroom.

This means that in just the 20 cities we surveyed—that is all we did; we picked 20 cities—in the 20 cities we surveyed, annual special education costs increased by more than \$150 million since the crack cocaine epidemic first hit each of these cities.

But as bad as the situation is already, these trends are almost sure to worsen in the years ahead. Even if tomorrow we eliminated from ingestion by any American crack, we still have a numerically identifiable number of children who were born to crack abusers that haven't even gotten into the pipeline yet. So you have got at least 3 to 5 years that we haven't seen yet coming through the pipeline.

The 5-year-olds in special education programs today will be entering kindergarten in the fall and more young children are on the way. Indeed, the wave of children entering the special education programs can be expected to follow the same grim march across America that the crack cocaine epidemic began in 1985.

In short, the tears that we all shed a few years ago at the sight of the first crack baby writhing in a crib in an intensive care unit in a hospital. That first time we saw it will be multiplied many times more, along with the shouts of frustration and despair we are bound to hear from educators, from taxpayers, from police officers, from all the social service agencies in this country.

That is the primary reason that I asked our witnesses today, the leading pediatric researchers and educators in this field, who have already told us about two of the major links between crack cocaine and the recent massive rise in the need for special education.

Now, I ask unanimous consent—and it is easy to do when I am the only one here—that the remainder of my statement, so I don't take an unnecessary amount of time from the witnesses and I can get to questions, be entered in the record as if read.

[The prepared statement of the chairman follows:]

**STATEMENT OF SENATOR JOSEPH R. BIDEN, Jr.**

**CHAIRMAN, SENATE JUDICIARY COMMITTEE**

**"COCAINE KINDERGARTNERS:**

**PREPARING FOR THE FIRST WAVE"**

**MAY 16, 1991**

TODAY'S HEARING -- ONE OF A SERIES OF HEARINGS  
CONCERNING THE NATIONAL DRUG CONTROL STRATEGY --  
EXAMINES AN OMINOUS NEW TREND IN OUR DRUG EPIDEMIC.

WE OFTEN TALK ABOUT OUR FAILURE TO KEEP DRUGS  
OUT OF THIS COUNTRY; OUR FAILURE TO PREVENT THEIR  
DISTRIBUTION; OUR FAILURE TO PROVIDE ADEQUATE  
TREATMENT PROGRAMS -- WITHOUT STOPPING TO THINK  
ABOUT THE HUMAN CONSEQUENCES OF THESE FAILURES.  
TODAY'S HEARING PROVIDES US ONE CASE STUDY OF THOSE  
CONSEQUENCES.

**TEACHERS, SCHOOL ADMINISTRATORS AND LOCAL OFFICIALS FROM AROUND THE COUNTRY HAVE WIDELY REPORTED THAT THEIR SCHOOLS ARE BEING FLOODED BY A HUGE INCREASE IN CHILDREN NEEDING SPECIAL EDUCATION.**

**SCHOOL OFFICIALS AND OTHER EXPERTS -- INCLUDING OUR WITNESSES HERE TODAY -- HAVE NOTED THAT THESE INCREASE FOLLOW JUST A FEW YEARS AFTER THE CRACK-COCAINE EPIDEMIC FIRST HIT AMERICAN CITIES.**

**TODAY, WITH THE HELP OF OUR WITNESSES -- LEADING EXPERTS FROM THE FIELD -- WE WILL TAKE THIS FIRST LOOK AT THIS SHOCKING CONSEQUENCE OF OUR DRUG EPIDEMIC: A TREMENDOUS RISE IN SPECIAL EDUCATION NEEDS IN CITIES ACROSS THE NATION.**

**THE MAJOR CAUSE -- BUT, LET ME BE CLEAR, NOT THE ONLY CAUSE -- OF THIS RISE CAN BE FOUND WHEN WE LOOK BACK TO WHEN THESE CHILDREN WERE BORN: 1985 TO 1987 -- THE FIRST YEARS OF THE CURRENT CRACK EPIDEMIC.**

**WE HAVE PREPARED A FEW CHARTS TO ILLUSTRATE HOW SERIOUS A PROBLEM THIS HAS BECOME. OUR FIRST TWO CHARTS SHOW THE FOLLOWING:**

- \* IN TWO OF THE CITIES FIRST HIT BY THE CRACK-COCAINE EPIDEMIC -- MIAMI AND LOS ANGELES -- THE NUMBER OF 3 TO 5 YEAR-OLDS IN SPECIAL EDUCATION HAS DOUBLED SINCE 1986, WHEN THIS EPIDEMIC BEGAN.**
- \* IN NEW YORK CITY, THE LAST YEAR ALONE SAW A 26% INCREASE IN THE NUMBER OF 3 TO 5 YEAR-OLDS IN SPECIAL EDUCATION PROGRAMS.**
- \* CITIES OF EVERY SIZE AND IN EVERY REGION OF THE COUNTRY ARE SUFFERING THESE HUGE INCREASES -- COLUMBUS, NASHVILLE, EL PASO, AND SEATTLE ALL SAW AN EXPLOSION IN THE NUMBER OF YOUNG CHILDREN NEEDING SPECIAL EDUCATION IN THE YEARS SINCE THE SPREAD OF CRACK-COCAINE.**



\* THE COST OF THESE CHILDRENS' SUFFERING, OF COURSE, CANNOT BE MEASURED IN MERE DOLLARS. HOWEVER, AS CAN SEE FROM OUR THIRD CHART, THE ANNUAL COST OF THE SPECIAL EDUCATION SERVICES REQUIRED BY JUST ONE CHILD RUNS AS HIGH AS \$16,700 -- THREE TO FOUR TIMES THE COST OF EDUCATION IN A REGULAR CLASSROOM.

\* THIS MEANS, THAT IN JUST THE 20 CITIES SURVEYED, ANNUAL SPECIAL EDUCATION COST INCREASED BY MORE THAN \$150,000,000 SINCE THE CRACK-COCAINE EPIDEMIC FIRST HIT THESE CITIES.

BUT, AS BAD AS THE SITUATION IS ALREADY, THESE TRENDS ARE ALMOST SURE TO WORSEN IN THE YEARS AHEAD.

FOR THE 5 YEAR-OLDS IN SPECIAL EDUCATION PROGRAMS TODAY WILL BE ENTERING KINDERGARTEN IN THE FALL;

AND MORE YOUNG CHILDREN ARE ON THE WAY -- INDEED, THE WAVE OF CHILDREN ENTERING SPECIAL EDUCATION PROGRAMS CAN BE EXPECTED TO FOLLOW THE SAME GRIM MARCH ACROSS AMERICA THE CRACK-COCAINE EPIDEMIC BEGAN IN 1985.

IN SHORT. THE TEARS WE SHED A FEW YEARS AGO AT THE SIGHT OF THE FIRST "CRACK BABIES" WRITHING IN HOSPITAL INCUBATORS WILL BE MULTIPLIED MANY TIMES MORE -- ALONG WITH SHOUTS OF FRUSTRATION AND DESPAIR -- AS WE WATCH THESE CHILDREN ENTER OUR NATION'S CLASSROOMS.

OUR WITNESSES HERE TODAY -- THE NATION'S LEADING PEDIATRIC RESEARCHERS AND EDUCATORS IN THIS FIELD -- WILL TELL US ABOUT THE TWO MAJOR LINKS BETWEEN CRACK-COCAINE AND THE RECENT, MASSIVE RISE IN THE NEED FOR SPECIAL EDUCATION.

**FIRST, FETAL EXPOSURE TO COCAINE CAUSES A GREAT RANGE OF NEUROLOGICAL PROBLEMS, AND**

**SECOND, MANY TEACHERS ALSO NOTE THAT CHILDREN RAISED IN DRUG-ABUSING HOMES OFTEN SUFFER DEEP PSYCHOLOGICAL WOUNDS AS A RESULT.**

**THESE TWIN EFFECTS -- "NATURE AND NURTURE," IF YOU WILL -- COMBINE TO LEAVE CRACK-EXPOSED TODDLERS ILL-EQUIPPED AND UNABLE TO LEARN, TO LISTEN -- OR EVEN TO PLAY LIKE OTHER KIDS.**

**TOO FEW OF THESE TODDLERS HAVE BEEN HELPED -- FOR THERE ARE ONLY A HANDFUL OF INNOVATIVE PROGRAMS DESIGNED TO PREPARE THEM FOR KINDERGARTEN AND THE YEARS AHEAD.**

**THE REST OF THESE CHILDREN WILL START SCHOOL  
ALREADY SEVERAL STEPS BEHIND THEIR PEERS -- AND,  
UNLESS THEY GET HELP, THEY WILL FALL FURTHER BEHIND  
STILL.**

**OBVIOUSLY, URGENT ACTION IS NEEDED. THAT IS WHY I  
STRONGLY SUPPORT TWO MAJOR PIECES OF LEGISLATION  
OFFERED BY SENATOR KENNEDY AND SENATOR DODD, TWO OF  
THE NATION'S LEADING ADVOCATES FOR CHILDREN AND  
EDUCATION.**

**SENATOR KENNEDY'S "SCHOOL READINESS ACT,"  
EXPANDING PRENATAL CARE PROGRAMS AND THE HEADSTART  
PROGRAM TO ALL CHILDREN, WILL GO A LONG WAY TO  
ENSURING THE HEALTHY DEVELOPMENT OF ALL INFANTS AND  
YOUNG CHILDREN.**

**THE "CHILDREN OF SUBSTANCE ABUSERS ACT,"**  
**AUTHORED BY SENATOR DODD IS ALSO A VITAL COMPONENT**  
**TO RESPOND TO THE MASSIVE INCREASE IN SPECIAL**  
**EDUCATION NEEDS, WITH ITS PROPOSAL TO HELP TREAT**  
**DRUG-ADDICTED PARENTS AND FAMILIES.**

**AND ABOVE ALL, WE MUST FUNDAMENTALLY REDIRECT**  
**OUR NATIONAL DRUG CONTROL STRATEGY. THE BILLS THAT**  
**SENATORS KENNEDY AND DODD HAVE PROPOSED CAN HELP**  
**US COPE WITH THE PROBLEMS OF CRACK BABIES WHO ARE**  
**NOW GROWING UP. A REDIRECTED DRUG STRATEGY CAN HELP**  
**PREVENT SUCH TRAGEDIES IN THE FUTURE.**

**THE ADMINISTRATION'S DRUG STRATEGY PROVIDES**  
**TREATMENT FOR ONLY 14 OF 100 PREGNANT ADDICTS. THE**  
**ALTERNATIVE STRATEGY I HAVE PROPOSED WOULD PROVIDE**  
**TREATMENT FOR ALL PREGNANT ADDICTS WITHIN THE NEXT**  
**TWO YEARS.**

**YES, MY PROGRAM HAS ITS COSTS -- ABOUT \$950 MILLION A YEAR. BUT AS WE WILL HEAR TODAY, A CONTINUATION OF THE ADMINISTRATION'S PROGRAM HAS EVEN MORE STAGGERING COSTS -- BOTH IN TERMS OF DOLLARS AND HUMAN LIVES.**

**IN CLOSING, I BELIEVE THAT THIS FIRST LOOK AT THE MASSIVE RISE OF SPECIAL EDUCATION NEEDS WILL CONFIRM OUR WORST FEARS -- THE COST OF TOO MANY YEARS OF INACTION IS HITTING HOME TODAY.**

**WE CANNOT DELAY ANY LONGER. WE MUST ADDRESS THE CRISIS OF THE DRUG BABIES WHO HAVE ALREADY BEEN BORN, AND, AT THE SAME TIME, WE MUST TAKE STEPS TO MAKE SURE THIS GENERATION OF CRACK BABIES IS THE LAST.**

**THANK-YOU.**

The CHAIRMAN. Now, in closing, I have been proposing for several years now—it has fallen to me, Doctors, every time the President, as a consequence of us having a national drug director now—one benefit from that, as a minimum, and it is arguable, the remaining benefits, to the extent there are any, has been that it has forced on the national agenda a requirement for the President to put forward a document that says here is the national strategy that I propose. And it has fallen to me to be the person who introduces the other national strategy, to the extent that they differ and that we disagree.

I have for some time now, in the national strategies I have proposed, been calling for a complete, total availability of rehabilitation and treatment facilities for mothers, including, at the suggestion of Senator Moynihan and others, providing—as you suggested, Dr. Davis, there is a holistic approach that is required in dealing with these mothers and children as it relates to education; there is, also, in terms of drug treatment that similar requirement.

Mothers don't go into these treatment programs, even though they are pregnant, with a 2-year-old at home because they don't want anybody to know because they are afraid the 2-year-old at home will be taken, the baby that is born will be taken, and they cannot afford, even if they could get in, to take the 2-year-old into treatment with them because there is no one to take care of the baby—and so including providing for the ability of these programs to expand to care for the children who are, in fact, the children of mothers who are in this circumstance.

It costs a lot of money. It costs \$950 million to treat every, assuming they are willing—and not all are, so let me make that clear so we understand that. But to treat all crack-consuming pregnant women in a year period costs us \$950 million in my program, which is a lot of money. But if we are increasing in just 1 year—it is kind of like a boa constrictor swallowing a large animal. We are watching this bulge go through the system; it is going to get bigger, not smaller, as ingested. If the increase in special education costs was \$150 million in just this 1 year, we are talking about a lot of money down the road.

So I believe that this first look at the massive rise in special education needs will confirm at least my worse fears—I hope I am wrong—that the cost of too many years of delay and inaction is beginning to come home now. And so I don't think we can delay much longer, and I don't want to delay the questions I have much longer.

Dr. Davis, let me begin, if I may, with you and follow up on just a point of personal interest that I have. You indicated that you not only are from Harlem, you now live in Harlem and you practice in Harlem. And you, as a resident and a health professional, have seen a change, I think you said, a significant change.

Tell me about the change as it relates, if it relates, to the impact upon the familial structures that existed 10 years ago and 15 years ago in Harlem. And I would just make one comment. On of the things about cocaine is it is a great equalizer, unfortunately. We had prior to the cocaine epidemic really hitting—and, again, we can almost document the dates of the starts in each of the cities.



For every four men that were ingesting a controlled substance, there was one woman, and now it is right up there, man. It is about, you know, close to one-for-one right now because cocaine has become a drug that has been found to be very appealing to women, whereas many of the other drugs in the past have not.

So can you tell me if there is any—I am not asking you for a professional diagnosis. I am asking you, as a citizen living in Harlem, is there a change as a consequence of cocaine and crack in the region?

Dr. DAVIS. Absolutely. Black families typically have been matriarchal, and when I say that I mean at least 35 to 40 percent of black families in this country are probably headed by a female. And certainly in the more devastated parts of the city, you are going to get even higher numbers than that.

In the 1950's, 1960's and 1970's, when heroin was around, we had our numbers of female drug users, but they were small. And, in fact, some of the heroin users who were able to get into methadone programs continued to take care of their babies, in the 1970's when I was still in medical school we had many of those mothers who were still—they would come to their treatment program, get their methadone, and take their babies home with them.

Crack has done something quite different, though. Certainly, in Harlem I was witness to people coming in to school grounds giving crack out free, not just in elementary schools, but in junior high schools. The women found it very attractive. In fact, crack became the thing that men would give women, instead of flowers or candy, in order to court them, which meant that these female-headed households very often were now being headed by women whose primary goal was to get the next hit, so to say.

So I think what we are seeing now is a drug that really, because of its appeal to females, has really devastated whole families, and that had not been the case up until about 1985. I mean, families continued to struggle with mothers being the caretaker, with grandparents being available, and what have you, but right now we have families that have totally disappeared. We certainly have never had the numbers of youngsters in foster care that we have now, which is about, I guess, 45,000 now.

We certainly have never had grandparents being called on before to the extent that they are being called on now, and we certainly have children who are—I won't say roaming the streets, but we have children who really feel they don't have a home base anymore. It is difficult to bond to foster parents unless they get you when you are a baby.

I mean, we have made great attempts to get kids into foster care right from the hospital, but many of our crack-affected children who went home with their parents later wound up going into foster care and into multiple foster care placements, and these are youngsters who never bond to anyone.

So we have seen a drug that has literally devastated the society by devastating the family, and I would say that the black family has been particularly prone to this because, in fact, for most of our history we have seen families that have not been headed by two persons, a man and a female. That is not to say that we don't have married couples. We certainly do, but I am saying when you take

away the female head of an inner city family, you are taking away the family structure.

The CHAIRMAN. Thank you very much, Dr. Davis. Dr. Howard, Dr. Powell—I don't know whether she explicitly said it, but at least implicit in her statement was we have got to be careful about labeling these children. We have got to be careful about putting these children in a circumstance where they are not able to be mainstreamed at some point along the way in education.

Is that correct, Dr. Powell? Was that the essence of what you were saying?

Dr. POWELL. Yes.

The CHAIRMAN. How important is it behaviorally in terms of their future capability of eventually being integrated into society that we—in the process of dealing with the fact of their existence and the impact that crack and other substances have had upon their ability to develop, how important is it that that be avoided as we go along, and if it is, how the heck can we do that?

Dr. HOWARD. Well, this is a topic that has been discussed a lot, and there is a lot of criticism about labeling the children. I am not sure what it really means because I am hearing what you are saying. What I hope doesn't happen is that I hope that we do not unlabel the fact that these children are coming from substance-abusing families if they are still within that family unit.

If you have a child in fourth grade who is living with his family, whose parents are substance abusers, and doesn't make it to school on Monday, someone better find out where that child is. Someone better find out was there a bust over the weekend in that house. That child may now be in a downtown area being contained by children's protective services waiting for a court date, waiting to see if that kid goes into foster care and another school system.

Somehow, these children have to remain visible in the community. They are at very high risk for child abuse and neglect, and I don't mean to label them in the negative, negative ways that they are not worthy as human beings by all means.

I think in terms of what is going to happen with these children, these children are going to learn about what has happened in their families. We have mothers now who sit in their groups when they come, and they come from substance-abusing families themselves and they talk about the horror of growing up with a dad that was high or a mother that was high. They talk about the fact that they wonder if the prenatal experience they had when their mother was heavy using alcohol, valium—did that interfere with their ability to learn in school? They develop their support systems right there.

So just as you have the adult children of alcoholics, down the line we are going to have the adult children of addicts, and that is the kind of healthy supports, I think, that will need to come in.

But in terms of the school systems, getting back to that, and the labeling, what we have to do is we just have to identify the areas where the children are having trouble learning in school, socializing, interacting with others, not just have somebody say, oh, that is a drug kid. You don't want that. What you want is, now, wait, that child is having some difficulties; let us find out what is happening in that child's life now, what is happening if I do this and this

within the classroom and support that child. You know, that is where I hope it goes.

The CHAIRMAN. Well, Dr. Powell, I am going to be very parochial for a minute. My wife is an educator, not with the same expertise that you bring to this issue. But one of the things that she finds most difficult, having taught, at least in our State, in the school that was considered to be one of the rougher schools at the time, where because of school busing—and I don't say that critically, but because of school busing, the irony was that the poorest white section and the poorest black section in the entire area were located in one school. Ironically, the race relations increased tremendously. I mean, it was amazing how that worked, but that is another issue.

But what she found was a great difficulty on the discipline side and a frustration of wanting to know why a particular child was acting out in certain ways. The inability to know why that child had that particular problem frustrated her ability to know how to deal with it.

For example, a child who was dyslexic, my wife, not knowing whether or not that child was dyslexic or had—what is it called, attention deficit syndrome.

Dr. POWELL. Disorder.

The CHAIRMAN. Disorder. It makes a difference when a child, in the middle of another child—this is high school—in the middle of another child reciting for the class, the child just stands up in the middle of class. She doesn't do anything; she just stands up in the classroom, just stands up and sort of stretches her legs and kind of walks around her desk. I mean, it is one thing if the child is just being troublesome, it is another thing if the child has great difficulty sitting in that chair, to know how to react.

And so as I look at this issue in light of what you have said, how can we not have teachers who are going to have these children—assuming the behavior that you have documented you are seeing now among those 3- to 5-year-olds, when they are 12- to 15-year-olds, aren't the teachers going to have to know whether or not the violent behavior that they may see manifested or the antisocial behavior that they are seeing is a consequence of this particular problem, or is it not relevant that they know that, or do we need to specially train teachers, or all three, or none?

Dr. POWELL. Well, I think that I had indicated to you that the preparation of teachers, teachers who are currently in-service and preservice teachers, is going to be a major issue. I know that in the District, one of the things that we have is a transition process in which we are able to track our children based on I.D. number. So we know where these children are and we will be able to follow them longitudinally. And I believe in other States we are doing that so that we can provide teachers with supports and very specific strategies to support these children.

But what we are also finding is that some of the behaviors that we observe are not that dissimilar from what we are already seeing in classrooms, and there is a large debate about environmental implication on children. Certainly, in our urban areas, as my colleagues have both said, there has been a major shift in the family system, and this shift in the family system is something that spans across economics.

I mean, you look at your more affluent families and you have children who are being raised by nannies. You have children who are parenting themselves in some of our families where there aren't the resources. But I think when we look at just the differences, teachers have to be trained; they have to be made aware.

I think teachers need to understand some of the documented characteristics that we see from children. But as I said before, we need to talk about children as children. We don't want people to begin to say, oh, well, he must be a drug-affected child, because what we have documented in our study is we have an integrated model and we have 5 children who were documented as being substance-exposed with 10 who have not been exposed in the same classroom. So, that is 15 children in a classroom.

Often, if people go in and observe these children, they will point out children who are not exposed to substance as being those who have been because of what they are seeing observably in terms of some of their behaviors. So what we have found is that it is very important to provide people with strategies that will respond to very specific behaviors so that they are armed and well-tooled in terms of what do you do in terms of intervention.

Also, I think the piece in terms of working with families is very, very critical, and that is why home-based intervention and taking these same strategies into that home are very, very important. Getting parents out to the degree that it is possible—and, again, keeping in mind that my definition of parent and family is not the standard definition, but getting the primary caregiver out and sharing with them—it has to be collaborative; this is nothing that can be done in isolation. It is a pooling of resources across agencies and across delivery systems that is going to be important. Certainly, as a part of that, retraining and retooling teachers is going to be a major effort.

The CHAIRMAN. Well, again, this is a little out of my field, but clearly within my interest. This notion of strategies and what strategies teachers should be armed and prepared with—unless we are able to, as a consequence of very early intervention, in effect, for lack of a better phrase, correct the deficiency that these children have been born with as a consequence of the drug addiction, to the extent that they are going to be with them and have to be dealt with throughout their educational career, it seems to me the strategies are important.

A child with low self-esteem as a consequence of a verbally-abusing father and mother, I think—I don't know; it is a question—is dealt with one way by a teacher. If a teacher knows that, there are many ways you can reinforce the self-esteem of that child by what you have them do in school, by how you treat them, by authority you give them, by things—it is very self-serving, but I mean it is one of the things that I marvel at how my wife does it; I mean, what she does.

It is another thing if it is a consequence of—and this is a question. Is it another thing if it is a consequence of a physical impact of the ingestion of a drug during pregnancy by a woman on that fetus and subsequent developing child? Are they the same strategies that one would use to deal with the self-esteem problem that you observed in crack babies who are now 5 years old, as opposed

to a child whose self-esteem is taken from them as a consequence of, in the aftermath of a divorce, a step-mother or father who denigrates the child? I mean, are they the same strategies one would use?

Dr. HOWARD. Some of the strategies are going to be similar, but some of the outcomes may not be. If you have a child who has a compromised ability to deal with change—and we have noticed with the children who have the prenatal exposure to drugs and alcohol—then you not only have to do what you talk about with what your wife has done and what other teachers have done to support that child going through a really horrible event in his or her life, but you might have to also keep up that support a little longer, for instance.

But it is just that these children are going to have—some of them will have some real compromised abilities to deal with what is going to happen to them, and we have to learn to hang in there a little longer with them.

The CHAIRMAN. As health care professionals, do you have enough data at this point to make a judgment as to whether or not the compromised abilities—and they are multitude—whether those abilities are able to be restored, or are we looking down the road, if we know, to children whose abilities will be compromised, notwithstanding the strategies that we know of now, notwithstanding the fact that those strategies are applied at an early stage? I mean, do we know how permanent any of this is?

Dr. DAVIS. I will take a stab at it. I think the answer is really not in. It is very clear, again, that in a minority of these cases where there are clearly abnormal neurological findings that one might expect long-term disability. I think what we have seen thus far is that early intervention absolutely does work to a large extent with many of these youngsters.

Perhaps it has to do also with the amount of drug the youngster was exposed to, the time of exposure, and what have you, in the sense that there are some children who, in spite of all kinds of interventions, don't get any better. But I still say that the absolute majority of these youngsters will be able to function within the society, as far as we know.

But there is something we have to keep in mind, and this can be borne out by research with regard to alcohol effects. Some of the youngsters who have been exposed to alcohol and who have been worked with early on seem to do quite well, and they do well for years, only to reach teenage years where there are different skills and abilities that are being called to the fore that they cannot mount. And I think only time is going to tell with regard to the effects of cocaine.

I think our attitude, though, has to be that this is not a lost generation, even though I think Dr. Howard and I—I mean, being physicians and seeing the worst scenario, we are certainly going to paint a more bleak picture, I think, than an educator, and that is because these are youngsters who probably never get to a regular school setting, but again I think it is probably a minority of these youngsters. The overwhelming majority of these youngsters are going to do much, much better with early intervention.



I agree you begin at one day of life; you begin working with the family, you begin working with the youngster. And you continue that support not just in pre-school years, but also through years to come. We have talked amongst the three of us about what typically happens is that youngsters get early intervention services and then they are pulled away when the youngster enters kindergarten. That does no one any good, so services have to continue for long periods of time, not just in school, but with families.

Dr. HOWARD. Could I just mention something here?

The CHAIRMAN. Please.

Dr. HOWARD. There have been reams of research projects done for a reason in this area, and when you reach toddlerhood and you do research about what is the development of the toddler at that point in time and looking down, that is the predictive time now. It is not when the children enters kindergarten that only then can we predict.

When you are looking at toddlers, and the videotape that you probably have seen—but when you are looking at toddlers that are showing deviant kinds of development, you cannot say that, oh, that is going to go away. We know that that is the age now where we can predict.

But I think the most powerful predictor about outcome for these children always goes back to what we have known for decades, and that is the reason for Head Start. If you have children coming from disadvantaged backgrounds, that is the most powerful predictor for mental retardation. Mental retardation as a diagnosis, the number of children in that diagnosis—it is not because of what happened to them prenatally or what happened to them at the time of birth if there were complications. The environmental impact is so strong.

So with these children, and I think that is why we are talking long term, if they are compromised biologically, and certainly they are not going to fit—with excellent environments, these children are not going to fit into a retarded category. But if you supplied the support to that environmental ecological system that you mentioned, Dr. Powell, then we really can make a difference with these children. But if the schools alone are there just guiding them for 3 or 4 hours a day, I don't see how it can work.

The CHAIRMAN. Well, that was actually part of my next question because one of the things that I have been told and this committee has been told relative to the significance of crack-abusing mothers, mothers of children bearing the so-called crack baby that we hear about, is that a significant number of those women have no support system themselves, and that the notion that we are going to be able to have an environment, Dr. Davis, where the child is dealt with in the context of the family and/or the primary provider, the primary care—I apologize for my lack of knowledge of the terms of art, but the primary—

Dr. POWELL. Caregiver.

The CHAIRMAN [continuing]. Caregiver is significantly diminished, whereas a child born with a neurological deficiency as a consequence of a genetic circumstance where there is a primary caregiver who is the mother, or primary caregivers, a mother and father and what is left of the nuclear family, is a very, it seems to me, very different circumstance.

What I am trying to get a picture of is how realistic is it—well, you have outlined for us that the best prospects for these children are, A, to be detected early; B, to have intervention begin; C, that intervention begin with primary caregivers as part of the process; and, D, have the educational system reflect strategies and understand the required strategies to deal with these children.

Now, we have an education system that is viewed by many as, if not bankrupt, in difficult circumstances, where we are getting increased difficulty getting any money to spend any money on it, merely to teach children with no problem how to read and write, let alone children with difficulties.

We have a circumstance where we have many—I don't pretend to know the number, but a significant portion of these children are born into circumstances where they are—black and white makes not a lot of distinction, as I understand it—where the primary caregiver may be a 70-, a 68-, a 58-, an 88-year-old grandmother who is not, just looking at the actuarial tables, going to be around through the total development of that child.

And we have, as I said, a great reluctance on the part of the public generally to fund general education, let alone special education. But I don't think we should ever give up on any child, no matter what, because I don't believe we know enough about—with all that we know, I don't think we know enough to know ever when to give up on a child.

I know you are incredibly concerned, but I have become increasingly concerned about the ability to make programs like yours, Dr. Powell, not work, but work in the sense that they get funded, that people pay attention to them.

What was the greatest difficulty you have had thus far in making your approach to this problem a reality? What are the greatest stumbling blocks, what kind of people? Was it the government? I mean, where does it come from?

Dr. POWELL. Well, let me say that with our project it was a little different because this is an outgrowth of the superintendent's initiative in which all of the agencies came together and said we need this. So we didn't have a stumbling block when it came to responding to this issue because it was recognized as a major problem.

Here at D.C. General right now, the most current statistics from January through March suggest that we have about 2,736 new babies that have been born prenatally substance-exposed. So we are recognizing this as a systemic issue here within the District.

I think that possibly some of the types of issues that we do have concerns about are the expansion of a project. We would like to serve more children. We are not serving as many as we feel that we could serve at the level that we would like to serve them because there is an issue in terms of having the financial resources available to provide the level of support that we want to have.

The CHAIRMAN. What percentage—rough guess—what percentage of the children who you think would be benefited by the services you have amassed and put together are being serviced?

Dr. POWELL. A very low percent, maybe 5 percent.

The CHAIRMAN. Do you have any notion—this is not a budget committee. I am not looking for you to put together a budget for me, but are we talking about 20 times in funding of what you have



now to get to the level of servicing the children you would need? Are those the kind of numbers we are talking about?

Dr. POWELL. Over the long run, probably even more than that because we are looking at children—56 percent of the babies born that were tracked on the zero to three tracking system through D.C. General—and that is aggregate of the data across all the hospitals in this city, and that is only documented cases because if you can afford not to go through a public health service agency, you don't have to document the problem. So we are talking about 56 percent of the babies in the figures that I have just quoted to you. So, that is probably a gross underestimation of what we actually have.

Now, those are babies now; we can take them at 3 years old. So, certainly, you know, we certainly don't have the level of programming available to the children that we would like to have available.

The CHAIRMAN. Well, again, see, what worries me is I think your fear, Doctor, about the labeling of these children is, as we all do, totally legitimate, but I feel it is legitimate for a reason maybe we are not willing to talk about.

I am worried, if we don't do something about this problem continuing to expand—and it will expand geometrically, not arithmetically, because if there are 300,000 children today in that circumstance—and there are more, but if there are 300,000, then next year there are 600,000, and the next year there are 900,000, and they are all in the system—it is not like 300,000 get in in one year and they are out and a new 300,000—it continues to grow.

And what I am worried about is with these new, what I believe to be foolish notions about how to educate children coming from—I am worried that we are going to say in this community, in this society, well, look, kids who have no social problems, we will educate them by this means. They can opt out of the system and they can do it by a voucher or they can do it by choosing a school; they can do it by whatever. Kids who are in this category, we will educate them a different way, and kids who are in this category, we will educate them a different way.

My worry is what is going to happen is, when this problem becomes clear to the American public 5, 7 years from now and we are talking about having to spend an additional \$1 billion, \$2 billion, in special education programs in order to accommodate the legitimate needs of these children, you are going to find some brilliant soul in this town and in every city of America saying, well, why don't we just take them and put them over here, and let us just take care of the problem and essentially assume that we are not going to be able to do much for them.

I think we are doing that right now with the drug problem. The more that people in this community and this society understand that casual use is down, which means that white upper-middle-class kids are less likely to consume, and the more the problem moves, figuratively speaking, to Harlem, the less a problem it is, even though the problem may be greater in terms of total numbers of people. I have been in this too long. I have kind of watched that happen, and that is what worries me about this.

Yes, Dr. Howard.

Dr. HOWARD. Well, I was under the assumption that all children in our nation were somehow protected by Public Laws 94-142 and 99-457.

The CHAIRMAN. Well, that is true now.

Dr. HOWARD. Yes; and when I think about these children and I think about them at risk and those that are going to require special services, it has to be in the least restrictive environment, which we would hope would be a mainstream setting. You know, that is how I was looking at it, that these children are covered by a Congressional mandate.

The CHAIRMAN. Well, let me be very clear, Doctor. What I am saying is let us assume the President's choice of policy goes into effect. What you are going to find, I predict to you, is that the choice exercised by middle-class blacks and middle-class Hispanics and middle-class whites is to move into a school setting, a school circumstance, a school district, a particular school that has significant parental involvement, has a good deal of—how can I say it—a good deal of attention paid to it.

You will find that these children, and the likelihood of them having primary care providers who are exercising choice decisions for them, are going to be very different than the choice decision exercised by the white or black middle-class person who is a young doctor, lawyer, or whoever, exercising for their child.

What I predict you are going to find is you will have schools over here that are left with nothing but children who have particular difficulties, social or—

Dr. DAVIS. That is already happening.

The CHAIRMAN. It already is happening, but I mean we think it happens now. Now, we see it happening in the inner cities because of the way things have happened. I shouldn't get off into this. I am worried it is going to happen in places we haven't even begun to see it happen yet.

Yes, Doctor.

Dr. POWELL. But I think it has to be a collaborative effort between both regular and special education because when you look at these children, what my interdisciplinary team is saying to me—and we have assessed these children. Some of these children are not eligible for special ed; right now, they are not presenting as special ed children.

These children may not look that different from their non-exposed peers, and I think that that is something that we absolutely cannot forget because we can't assume that they are going to be picked up by special ed now. They may be picked up by special ed 5 years or 10 years down the line, or maybe even 2 years down the line.

But we have to look at what types of supports and resources we can bring to these children right now. That is why I think the whole concept of looking at full inclusion, lowering the class size, putting in the interdisciplinary supports that children need, and really having educators there, especially with your early intervention, early childhood programs, that know about developmentally appropriate practices, is going to make a difference.

We are talking about not putting little children in classrooms where you have a demand that they sit at a desk and do seat work,

but we are talking about environments that encourage exploration. We are also talking about environments in our case in which we have made major modifications in terms of the space that these children use. We are building lofts, we are providing areas where there are lots of pillows, we are decreasing things that are stimulating environments. In some classrooms, we need things that are more stimulating.

We are teaching children how to make choices and how to self-select, and monitoring what they do in these areas and facilitating learning, and looking at the patterns of incidental learning, as well as having, for example, the speech pathologist work with those children in the classroom and build language, but build language as a part of play, not isolating them and pulling them out for these special services.

So I think that what we have to look at is how we deliver this, and also what we have to look at is the benefit. In our case, what we have seen is a lot of reciprocal learning. We have children who are learning because of the behaviors that are modeled by nonexposed peers. The inverse is that in some instances we have had children who have been exposed who have been the positive models.

We had a set of twins, and with the twins the parents reported that one of the babies had a lot of problems early on of crying, agitated, very aggressive even as a baby. And one of the twins had no problems. Cognitively, both of these children were intact.

By the age of three, what our social worker had reported is that we saw a reverse. One child who had none of the earlier signs was then exhibiting those things in the preschool, and they had asked the parents to remove that child from the preschool setting because the child was too aggressive, couldn't be controlled, wouldn't take naps, any of those sorts of things.

So I think we have got to look at the broader picture. We have got to look at what we can do, and we can't say all of these children will need special ed. What we can say is that these children are going to need special services and supports, but I think the way in which we articulate that—what we don't want to do is to give up ownership of our children, and I think to the degree that we say, oh, this is a special ed group, versus this is a regular ed group, then we have shifted responsibility, and I think it is very easy to do.

I talk with teachers regularly on a daily basis and I go out and work with groups of teachers who have these children in their classrooms, and these teachers are coming from areas across the city, from affluent areas to some that are less affluent. They are seeing differences in child behavior, in general, and some of these cases aren't documented.

As I am sure both of the physicians can attest, not everyone is going to get picked up in terms of who these abusers are in terms of mothers. So we have to arm our educators with the tools necessary to respond to children because we don't know which ones will not be reported cases.

The CHAIRMAN. I think you make an incredibly convincing case, but the point that I wish to make is at least the present political reality is that the vast portion of all funding for all these programs

comes from local governments and States, and the vast number of all referenda in all States on even continuing to fund education at its present level, even with incremental increases for anything, are failing. They are failing overwhelmingly.

You can't even get the money in some areas where it is an entirely mainstreamed school in every sense of the word, where there are very few social problems, where there are very few educational problems—you can't even keep those schools open in the upper-middle-income environments of this country. They aren't doing it; they are turning it down. They are not paying for it.

The notion that we are going to be able to convince the American public at a local level—by the way, we really have to have a different spatial structure in our classrooms. What we are going to have to do is provide—and I am not in any way disagreeing with what you are saying. We are going to have to provide circumstances in the lower grades where there are more pillows and it is not a structured circumstance, and so on and so forth.

I hope—and maybe this will get so bad, it will change everyone's opinion as to what we have to do. What was the school district where the court forced it to stay open in California? What was it?

Dr. HOWARD. Richmond.

The CHAIRMAN. The Richmond School District. There aren't any particular problems in the Richmond School District, but they went overboard. This was the school district that 2 years ago everybody said was, you know, the model. It took a Federal judge to keep it from closing. The local people would not vote to even allow them to finish the last 2 months of school. They ran out of money. That is it, out of money, the kids are out of school.

Attitudes change. My concern, though, is attitudes changing about these children who are going to be, rightly or wrongly, labeled as coming from lower economic income strata of this country, a significant number located in inner cities. I am not as hopeful as I was 18 years ago when I came here, and I am one of those folks who is one of those big-spending liberals who keeps trying to spend more money on these things, and proud of it. It is harder to get votes. That is where I have, as you can sense, some sense of despair, and that is why I think we are going to have to somehow make an awfully powerful—I mean, there is a powerful case, but I am very worried.

Dr. Davis.

Dr. DAVIS. We are spending money at the wrong end, though.

The CHAIRMAN. Sure, we are.

Dr. DAVIS. I know we have not touched on all of those issues in society that lead to drug use. You know, the newspapers report that crack use is on the decline, but they hardly talk about the increase of heroin use.

The CHAIRMAN. Yes.

Dr. DAVIS. People are shooting up again, people are snorting heroin, people are doing all kinds of things with drugs. And unless we are willing to face some of the unbelievable issues of homelessness, lack of jobs, all the kinds of issues that lead to people being in a state of despair, then we are going to continue to have this problem.

So even though that is not the purview of this committee, it is my opinion that—

The CHAIRMAN. In a sense, it is. For example, I have been trying for 3 years in the drug strategy to force us to focus on things that we held hearings a year in advance saying it is coming, including the Senator from South Carolina, as well as the Senator from Delaware, saying, by the way, people are chasing the dragon these days. It is coming, smokable heroin. No; we are not going to focus on that. We will wait until it devastates again. Methamphetamines, a big, big problem coming, 2 years ago; by the way, education—no, no votes.

You are right. Maybe that is part of my despair, but I should be more upbeat about this and not have you walk out of here despaired because you all have to continue to be—anyway, let me ask you a question.

Dr. Davis, do you have any indication that the problem that is already showing up in center cities is also showing up from your colleagues in suburbs and rural areas of this country?

Dr. DAVIS. It is there. It is hidden, but it is there. These are families who can readily obtain preschool programs, you know, under the guise that the youngster is learning-disabled or that there are stresses in the home. But we really have to be aware that drugs are used all over the place.

I mean, if you roam around New York City, you will see people right down in midtown Manhattan—CEO's and their colleagues are all, you know, on the sly taking drugs in. So drugs are all over the place. It is just that we minorities tend to be the visible lot. And I guess if I despair, it is because we are talking about huge numbers and we are talking about an issue that has to be dealt within a broader view.

The minorities are the ones who are pin-pointed, but it is out there being used by everyone, and that is why I say society's pressures have to be looked at—you know, pressures in middle-class families where mother and father have to work, and I think you mentioned where children are left to take care of themselves, not so much the ones with nannies, but, you know, we have middle-class kids who are coming home to empty houses at ages 7 and 8. They are unlocking the door. Those are incredible pressures for those kinds of families, and many of those families turn to drugs, too, for solace. So, yes, drugs are all over the place.

The CHAIRMAN. Well, to confirm your point, several years ago—my goodness, it may be now 7 or 8 years ago—I did a report to try to point out the fact that heroin was on the rise in certain places, and why, and it was called the Sicilian Connection, and it received a wide airing and it turned out to be absolutely, totally accurate.

I am wrong about many things, by the way, and if you know anything about me, unfortunately when I am wrong I usually do it with the whole world watching, but I am wrong about many things. But on that, we were absolutely right.

And one of the things that was attendant to that is one of the news programs, the "20-20"-type—I think it was either "60 Minutes" or "20-20" did a piece where we took them downtown to the Wall Street area at noon time. And there was a walk-up and we showed them—they actually took cameras in, with people carrying



\$400 briefcases and wearing \$1,000 suits, in a line as long as a movie theater line, walking up to a door that was steel-plated with a little mail slot in it, two mail slots.

You would see these executives stick their money in and get their heroin out, and there was a long line. I mean, the line was as long as, you know, a movie theater line for the grand opening of a new—so you are absolutely right. What I am worried about, though, is the casual use, which is a precursor to hard-core consumption, is down significantly, but it is down significantly in certain areas and among certain people.

It is no longer chic in this town, Doctor, or any other town for young doctors, lawyers, professionals, educators to be at a party and have coke available. It is still done, but it is not what it was 10 years ago. As a matter of fact, 15 years ago in this town—less than that—the White House director for drug policy was criticizing me and others publicly for why are we coming down so hard on cocaine; it is not a problem and it is not addictive. So why are we dealing so much with cocaine? That was only 1978 in this city, in this Nation.

We seem not to learn anything from the past, by the way. This is the second great drug epidemic we have had in this country, and it wasn't in the 1960's. The last one was at the turn of the century, through the early teens, where a greater percentage of people were addicted to what are now controlled substances than are addicted now in this country on a percentage basis.

Certain things worked then and we have forgotten them all. Education worked; treatment, to a lesser degree because we knew less, worked. A whole lot of other things worked, but we don't do them now.

Let me ask unanimous consent that a statement by Senator Thurmond be entered into the record as if read.

[The prepared statement of Senator Thurmond follows:]

STATEMENT BY SENATOR STROM THURMOND (R-S.C.) BEFORE THE SENATE JUDICIARY COMMITTEE, REFERENCE, HEARING ON "COCAINE KINDERGARTNERS: PREPARING FOR THE NEXT WAVE, 328A SENATE RUSSELL OFFICE BUILDING. THURSDAY, MAY 16, 1991, 10:30 A.M.

MR. CHAIRMAN:

We are here to examine what may prove to be one of the most serious problems caused by our Nation's drug epidemic - the impact drug abuse is having upon children. The most innocent victims of the drug war are the children born to addicted mothers or who are raised in an unstable environment where they are daily witnesses to the horrors of drug abuse. Today, we will hear from several physicians and other experts on this aspect of the drug war. For example, they will testify about how the crack epidemic may be responsible for the recent rise in the need for special education among young children.

The Judiciary Committee has held numerous hearings on the problems associated with drug abuse and has worked with the Office of National Drug Control Strategy in formulating a strategy to eliminate illicit drug use. Yet, nothing is more troubling to me than the young innocent victims of drug abuse. Drug abuse not only harms the user but also the abuser's family. Clearly, drug abuse is not a victimless crime. It not only threatens today's society, but it seriously threatens future generations as well. Without question, winning the war on drugs and solving the numerous problems it has caused will not be easy.

-1-



Yet, our resolve to prevail in our efforts to end drug abuse must become stronger.

Today we will hear from several witnesses who will discuss the physical and emotional impact crack cocaine abuse has had upon the children in our nation's cities. These experts should provide the Committee with some insight into this problem and should offer some suggestions on what steps Congress can take to assist the States in their efforts.

For these reasons, I look forward to today's hearing.

The CHAIRMAN. We also have a statement from Senator Grassley which we will also include in the record.  
 [The prepared statement of Senator Grassley follows:]

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**STATEMENT OF SENATOR CHARLES E. GRASSLEY  
ON CHILDREN WHO ARE DAMAGED AND ABUSED  
BY DRUGS AND DRUG ADDICTS**

**SENATE JUDICIARY COMMITTEE  
SENATE LABOR COMMITTEE  
MAY 16, 1991**  
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MR. CHAIRMAN, THIS HEARING WILL SPOT-LIGHT ANOTHER TRAGIC CONSEQUENCE OF THE RAVAGES OF DRUG USE: YOUNG CHILDREN WHO ARE ADDICTED TO DRUGS, EITHER BECAUSE OF EXPOSURE IN THE WOMB OR WHO WERE ABUSED AND NEGLECTED BY PARENTS WHO THEMSELVES ARE DRUG ADDICTS.

THE NATIONAL DRUG CONTROL STRATEGY MAINTAINS THE WORTHY GOAL OF PRESERVING THE FAMILY UNIT. HOWEVER, IT DOES ACKNOWLEDGE THAT OUR PRESENT SUPPORT SYSTEMS MAY KEEP SOME FAMILIES TOGETHER TO THE DETRIMENT OF THE CHILDREN OF THOSE DRUG ADDICTS WHO ARE - FOR WHATEVER REASON - UNABLE TO STOP THEIR DRUG USE.

THE STRATEGY CALLS FOR THE STATES TO CONSIDER POLICIES THAT TERMINATE - WHERE APPROPRIATE - PARENTAL RIGHTS AND THAT REMOVE THE CHILD OR CHILDREN FROM PARENTAL CUSTODY, AS EXPEDITIOUSLY AS POSSIBLE.

THE DEPARTMENT OF HEALTH AND HUMAN SERVICES IS TO ENCOURAGE THE STATES TO ESTABLISH FACILITIES TO PROTECT CHILDREN AT RISK OF CHILD ABUSE, NEGLECT, OR INCEST FROM THEIR DRUG-ADDICTED PARENTS.

THE DEPARTMENT WILL ALSO EXPAND ITS EFFORTS TO DEVELOP MODELS FOR A WIDE RANGE OF APPROACHES - FROM FOSTER CARE TO CONGREGATE CARE - FOR CHILDREN.

THE NATIONAL STRATEGY ALSO CALLS FOR COORDINATION OF A COMPREHENSIVE SYSTEM FOR THE DELIVERY OF SERVICES FOR DRUG-EXPOSED NEWBORNS SUCH AS PRE-NATAL CARE, CHILD WELFARE, SPECIAL EDUCATION, AND OTHER DRUG PREVENTION SERVICES. THIS INCLUDES A CALL FOR COORDINATION AT ALL LEVELS OF GOVERNMENT.

THE DEPARTMENT OF HEALTH AND HUMAN SERVICES IS ATTEMPTING TO IMPROVE THE COORDINATION OF THESE SERVICES AT THE FEDERAL AND STATE LEVEL.

HISTORICALLY, DRUG EDUCATION AND PREVENTION HAVE BEEN "SHARED" RESPONSIBILITIES. EDUCATION HAS, OF COURSE, BEEN THE RESPONSIBILITY OF LOCAL AND STATE GOVERNMENTS. AND THE PRIVATE SECTOR HAS BEEN ACTIVE IN UNDERWRITING IMPORTANT AND EFFECTIVE PREVENTION PROGRAMS.

BUT, AS HIGHLIGHTED IN THE NATIONAL DRUG CONTROL STRATEGY, THERE IS A STRONG ROLE FOR THE FEDERAL GOVERNMENT IN PROMOTING DRUG EDUCATION AND DRUG PREVENTION.

THE FEDERAL GOVERNMENT HAS THE ABILITY TO CONDUCT RESEARCH INTO WHAT REALLY WORKS IN PREVENTING ILLEGAL DRUG USE.

THE FEDERAL GOVERNMENT IS ABLE TO DISSEMINATE OBJECTIVE INFORMATION ABOUT EFFECTIVE PRACTICES AND TO SET UP PILOT PROJECTS AROUND THE COUNTRY.

AND, THE FEDERAL GOVERNMENT - THROUGH ITS NATIONAL LEADERSHIP AND THE POWER TO APPROPRIATE FUNDS - CAN HELP COMMUNITIES TO MOBILIZE SO THAT THEY CAN ESTABLISH DRUG PREVENTION POLICIES AND CURRICULA.

AS A MEASURE OF ITS COMMITMENT, THE ADMINISTRATION HAS PROPOSED SPENDING \$1.7 BILLION FOR DRUG PREVENTION PROGRAMS IN THIS FISCAL YEAR.

THIS TOTAL INCLUDES:

- \* \$636 MILLION FOR DEPARTMENT OF EDUCATION DRUG PREVENTION PROGRAMS AND RELATED DRUG PREVENTION RESEARCH AT THE DEPARTMENT OF HEALTH AND HUMAN SERVICES;

- \* \$165 MILLION FOR DRUG PREVENTION PROGRAMS IN PUBLIC HOUSING, ADMINISTERED BY THE DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT;

- \* PLUS, ADDITIONAL FUNDS FOR DRUG PREVENTION PROGRAMS ADMINISTERED BY THE JUSTICE DEPARTMENT.

BECAUSE OF THE COMMITMENT OF THE FEDERAL GOVERNMENT, THE INVOLVEMENT OF VOLUNTEERS AND OTHER PRIVATE ORGANIZATIONS, AND THE OVERALL CHANGE IN ATTITUDE OF THE AMERICAN PEOPLE TOWARD THE USE OF ILLEGAL DRUGS, THERE IS REASON FOR HOPE THAT THE WAR AGAINST DRUGS CAN BE WON.

AND, I STILL BELIEVE WE CAN WIN THIS WAR.

BUT, WE CANNOT DEPEND UPON EFFORTS TO REDUCE THE SUPPLY OF ILLEGAL DRUGS ALONE. YES, SUPPLY REDUCTION ACTIVITIES ARE TAKING THEIR TOLL: DRUGS ARE MORE EXPENSIVE; DRUGS ARE MORE DIFFICULT TO OBTAIN; AND, DRUGS ARE MORE RISKY TO PURCHASE.

HOWEVER, EDUCATION AND PREVENTION ARE THE FOUNDATION TO A LONG-TERM SOLUTION TO OUR COUNTRY'S DRUG PROBLEM. AND THE SUCCESS OF EDUCATION AND PREVENTION PROJECTS DEPEND UPON THE PARTICIPATION OF EVERY SECTOR OF THE COMMUNITY.

THANK YOU.

The CHAIRMAN. I have so many questions that I will trespass on your time the whole day. I will not make work for you, but I have three or four questions I would like to submit in writing to each of you and give you before you leave, and ask, at your leisure, if you could respond by supplying answers to them.

[The questions of, and responses to, the committee follow:]

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SANTA BARBARA • SANTA CRUZ

June 5, 1991

INTERVENTION PROGRAM FOR HANDICAPPED CHILDREN  
DIVISION OF CHILD DEVELOPMENT  
DEPARTMENT OF PEDIATRICS  
2310 REHABILITATION CENTER  
1000 VETERAN AVENUE  
LOS ANGELES, CALIFORNIA 90094  
(213) 825-4621

Joseph R. Biden, Jr.  
Chairman, Committee on the Judiciary  
United States Senate  
Washington, D.C. 20510-6275

Attention: Tammy Fine

Dear Senator Biden:

I am writing in response to your request for information about the developmental outcome of children exposed prenatally to drugs (specifically, to "crack" cocaine).

My research and clinical experience has been primarily with mothers who were heavy drug users during pregnancy. Our most current research findings compare a group of drug-exposed newborns with a group of non-drug-exposed infants with respect to developmental outcome through 24 months of age. The children are matched according to ethnicity and socioeconomic status, and all were born full-term and without medical complications. Over 50% of the children exposed prenatally to drugs had decreased brain growth as measured through head circumference, and these children scored significantly lower on developmental tests than those drug-exposed children who did not have decreased brain growth. Based on standardized measures, these scores reflect that the majority of these children will require special education services in order to help them with language, cognitive, and social development. However, using more specific research techniques (i.e., visual attention and organization of play), we anticipate that the majority of children exposed to heavy drug use during their mothers' pregnancy will require special educational services at some time during their elementary school years.

More specifically, the majority of children exposed to heavy drug use in utero are not globally mentally retarded. Instead, they will present as a group of children with IQ's above 70 and will fall under the umbrella of "learning disabled." Specific behaviors that may interfere with these children's learning ability will include short attention spans, poor organizational skills, memory lapses, emotional lability, impulsivity, and some gross and fine motor incoordination.

This information is based upon our experience with two groups of children who received intensive home-based intervention and excellent health care immediately following birth. If we take into account the impact of socioeconomic deprivation upon any child's development and add the component of the unique environmental situations of children living in chemically dependent households (e.g., multiple caretakers within the home and multiple home locations, inconsistent caretaking responses, violence, child abuse and neglect, poor nutrition, etc.), almost 100% of children exposed prenatally to drugs who are somewhat compromised in their learning and behavior skills based on their prenatal substance exposure will require some kind of extra educational assistance during their school years.

In response to your second question, I am unfamiliar with medical treatments for the use of Ritalin to control attention deficit disorder or use of Symmetrel to enhance neurotransmitter function. Clinically, my staff and I have tried using Ritalin, Benadryl, Symmetrel, caffeine, and short acting Valium, and have been unsuccessful in curtailing increased activity levels in these



Page Two

children who were symptomatic. Loretta P. Finnegan, M.D., Associate Director for Medical and Clinical Affairs at the Office for Substance Abuse Prevention and Senior Advisor on Women's and Children's Issues at the Office for Substance Abuse Prevention within the Alcohol, Drug Abuse and Mental Health Administration (telephone 301-443-2158), would be a good resource for you regarding specific researchers who are addressing the problem of medical treatment.

With respect to the questions submitted by Senator Dennis DeConcini, I submit the following responses. I heartily support the idea of comprehensive "one-stop" treatment programs for pregnant addicts and their offspring. However, I would like to be as helpful as I can in terms of addressing this topic. We professionals are facing a dilemma that we have not confronted heretofore. Obstetricians, pediatricians, nurses, social workers, and early childhood educators have the skills to work collaboratively to provide appropriate assessment and treatment services for high-risk families. Addictologists (usually internists or psychiatrists) and drug treatment counselors are familiar with treatment programs for adult alcoholics and/or addicts. None of the above has the training or long-term experience in combining their skills towards developing programs for pregnant substance abusers and their children. Furthermore, drugs such as "crack" cocaine, PCP, and "ice" are so new that we do not know the consequences of their long-term heavy use upon the user. We are on a new frontier, and demonstration programs alone will not suffice. We need carefully designed, interdisciplinary research demonstration projects that include experts in the fields of obstetrics, neonatology, child development, education, addictology, and mental health.

A possible strategy is to develop programs that take both short-term and long-term approaches. For instance, the short-term approach would entail immediate implementation of community-based day programs for children who reside in known substance-abusing families, including those who are in the care of extended family members. We have the skills to provide enriched programs that would curtail the effects of environmental deprivation (i.e., early intervention programs, Head Start programs) and provide enriched, stable environments that promote optimal development. A second focus of a short-term program would be community-based residential and outpatient drug treatment for the parents of these children, emphasizing what is known to be successful on the basis of past studies. The long-term approach would entail the establishment of comprehensive programs such as you have described that would have guaranteed funding over a period of at least 15 years. Periodic review of the success or failure of program components, with indicated adjustments based upon new information in the field, would insure a dynamic approach to this complex issue.

I hope that this information will be helpful to you, and I appreciate your leadership in this national crisis.

Most sincerely,

Judy Howard, M.D.  
Professor of Clinical Pediatrics  
UCLA School of Medicine

JH:cn

**Questions for Dr. Evelyn Davis:**

**While the amount of crack-cocaine ingested during pregnancy will, of course, vary widely, do you have any rough estimate of what portion of the children prenatally exposed to crack-cocaine will need special education services?**

**Are there any differences you have noted, even anecdotally, between children prenatally exposed to crack and those prenatally exposed to powder cocaine?**

The spectrum of abnormalities documented in a cohort of children prenatally exposed to cocaine and subsequently evaluated in the Harlem Hospital Pediatric Developmental clinic suggests that a sizable number of exposed children will need special educational service. In addition to high rates of prematurity, low birth weights and small growth measurements including microcephaly, delays in language skills, fine motor disabilities, abnormalities in play, hyperactivity and autism were all seen at an alarmingly high rate. (94%, 62.9%, 58.6%, 30% and 11.4%. See attached abstract which was published in the April 1990 Journal of the Diseases of Childhood). The latter abnormalities directly affect the manner in which children learn and have significant implications for school systems across our country.

Approximately 10% of the children with known exposure to cocaine in utero and born at Harlem Hospital Center during the past five years were referred for evaluation and treatment. Almost all of the infants and children needed early intervention programs of one kind or another. No one knows for certain what the other 90% looked like or what their educational needs might be. It is clear, however, that some children who appeared perfectly normal during early childhood are presenting with language and learning difficulties in school.

It is difficult to determine whether or not specific abnormalities in children can be attributed to CRACK exposure in utero compared to powder cocaine. CRACK use is widespread in our community yet many women deny its use and tell us they use cocaine. CRACK carries a stigma. Institutions, including denial of one's family, etc. are all associated with it. Unfortunately it is difficult to get accurate histories. In addition, drug testing will not differentiate between the two. Some of the children with the worse outcomes are those whose mothers used CRACK. Given our state of knowledge, however, we cannot say whether it is because of the specific nature of CRACK or whether it is because the fetus was exposed to more of the drug. The majority of CRACK users consume far more of the drug in a given time than do cocaine smokers.

ED/ta  
02/11/91

Evelyn Davis, M.D.  
Assistant Clinical Professor  
of Pediatrics  
Harlem Hospital Center

Question for Judy Howard M.D., Evelyn Davis M.D., and  
Dr. Diane Powell

submitted by: Senator Dennis DeConcini

A recent Time magazine cover story featured the plight of children born to mothers who repeatedly took crack cocaine during pregnancy. The dimensions of the tragedy are staggering. According to the National Association for Perinatal Addiction Research and Education, about 1 out of every 10 newborns in the U.S. -- 375,000 a year -- is exposed in the womb to one or more illicit drugs. The article concluded with the observation that the best way to rescue a child is to rescue the mother as well.

Towards this end, I introduced a bill to fund six demonstration projects in which addicted mothers in residential treatment would be allowed to have their children with them. These treatment programs would target economically disadvantaged addicted women and their children and would offer primary health care, child care, parenting and job skills, nutrition, and health, social, education, and employment services with follow-up services after discharge. The idea is to maximize successful treatment, keep families together, and prevent substance abuse in the second and third generations. Based on your professional experience in this area, do you support this approach? What else can we or should we be doing to salvage families damaged or destroyed by parental drug addiction?

I certainly applaud your introduction of the bill to fund six demonstration projects for addicted women and their children. Successful programs must address all aspects of the mother's life if they are going to break the cycle of drug abuse.

I continue to be bothered, however, by the hundreds of women who fail to take advantage of good programs, even when they are available. We politely ignore this issue, yet as one who both lives and works in a community devastated by drugs, I know it is a real issue. Chronic drug use is an illness and unless one admits to the illness he will not seek treatment. More substantive research is needed in this area. Yes, we need substantive programs, yet, how do we reach the thousands of drug-addicted women of child bearing age and convince them of the need for changing their lives? This is one of the real challenges.

I recently formed a grandmothers' group at Harlem Hospital Center. While the primary goal will be to support the grandmothers in their new roles as caretakers of babies and young children, another, and perhaps more important, goal will be to engage the grandmothers and their daughters in dialic treatment. Perhaps this will break the cycle of repeated births of drug exposed infants.

Ed/lee  
10/1/79

Evelyn Davis, M.D.  
Assistant Clinical Professor of  
Pediatrics  
Harlem Hospital Center  
New York

# **GROWTH AND DEVELOPMENT IN INFANTS OF COCAINE ABUSING MOTHERS.**

**E. Davis and L. Fennoy. Department of Pediatrics-Harlem Hospital, Columbia University.**

Cocaine in all forms is the number one drug of choice among pregnant women, leading to concern about the effects on the fetus and developing child. Records of 70 children with exposure to cocaine in utero who were referred for developmental evaluation at a large inner city hospital were reviewed in an effort to determine whether a specific pattern of abnormalities could be discerned.

All children received complete physical exams, neurological screenings and behavioral and developmental assessments based on the Gesell Developmental Inventory, and the Denver Developmental Screening Test. Documentation of specific drug use was obtained by history. Mean age(S.E.M.) at referral was 19.2(1.7) months.

All mothers used cocaine in one of its forms with 47% also using alcohol, 14% using opioids, 10% marijuana, and 7% PCP. Mean maternal age(S.E.M.) was 27.1(.78) years with 25% thirty years and above. Mean birth weight(S.E.M.) for full term infants was 2808 grams(87.4). Mean gestational age(S.E.M.) was 36.4(.7) weeks with 44% representing pre-term deliveries. The cocaine exposed children had a mean(S.E.M.) height age percentile(HAP) of 31.5(4.2) and a mean(S.E.M.) weight age percentile(WAP) of 30(3.9), while children admitted to our institution for failure to thrive had HAP=9.9(2.7),  $p<0.0001$  and WAP=6.9(1.6),  $p<0.0001$ . Ninety-four percent had language delay, 62.9% had fine motor delays, 37.1% had gross motor delays, and 54.3% had social skill

delays. Hypertonicity was present in 30%. Behavioral abnormalities included abnormal play in 58.6%, and hyperactivity in 30%. DSM III criteria for autistic disorder was present in 11.4%.

Growth parameters, though low, were not characteristic of children seen for failure to thrive. However, significant neurodevelopmental abnormalities and an alarming frequency of autism were seen. The high rate of autistic disorders previously unreported in children exposed to alcohol or opioids alone suggests specific cocaine effects. Prospective controlled studies with drug testing are essential for documentation.

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**OFFICE OF THE SUPERINTENDENT**

LEGAL, REGULATORY, AND LEGISLATIVE SERVICES BRANCH  
415 12TH STREET N.W. WASHINGTON D.C. 20004

August 15, 1991

**Ms. Tammy Fine  
Senate Committee on the Judiciary  
The United States Senate  
Washington, D.C. 20510-6275**

**RE: Responses to Follow-Up Questions From the  
Judiciary Committee Hearing of May 16, 1991**

Dear Ms. Fine:

Enclosed please find the above-referenced responses prepared by Diane Powell, Director of the D.C. Public Schools Project for Developing Appropriate Intervention Strategies for the Young Child ("Project DAISY"). I regret that the press of business prevented my transmitting these answers in a more timely manner.

For further discussion of Project DAISY, please contact Dr. Powell at 576-6937.

Sincerely,

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**Paula R. Perelman  
Legislative Counsel**

PRP:rrb

cc: Dr. Diane Powell

Enclosure

**Question from Senator Joseph Biden, Jr.**

What if anything, is different about the types of problems -- as well as the types of assistance needed -- by children who were prenatally exposed to crack-cocaine and children who were exposed to crack-cocaine by their "environment"?

Do you believe there are any potential dangers when children who have been exposed to drugs -- either in the womb or through their homelife -- are taught in the same classrooms as children who have not been exposed to drugs?

**Response****Question A:**

It is too soon to determine if there will be major differences between the types of problems and assistance which will be needed by children who were prenatally exposed to crack-cocaine in utero or environmentally. One can assume that direct exposure to such a teratogenic substance in utero will have an impact on state responses and physical development based on the degree to which the child was exposed. Some studies suggest that, over time, many of these children with early intervention will not present as being significantly different from their non-exposed peers. Environmental exposure may have an impact on social skills, interpersonal relations and, in some instances, emotional development, due to the impact of this drug on the family system.

**Question B:**

It is my professional opinion that there is no potential danger in educating substance-exposed children with their non-exposed peers. In fact, there are significant benefits to totally integrating these children in nurturing, developmentally appropriate child-centered educational environments with any types of related supports which they require. One must always keep at the forefront the fact that these children, while substance exposed, are children first. Consequently, it is critical that they are not stigmatized by negative labels which are depreciating and punitive, setting them up as a class apart from their peers. Preliminary findings from DAISY are showing that there is no significant difference in many of the behavioral areas between these groups of children. In fact, one of the most important variables which will impact on the functioning of these children over time is maturation and exposure. Although it is crucial that we understand that these children are "at risk", we need to continue to promote fully integrated programming with supports placed directly in the student's classroom.



### Question from Senator Dennis DeConcini

A recent Time magazine cover story featured the plight of children born to mothers who repeatedly took crack cocaine during pregnancy. The dimensions of the tragedy are staggering. According to the National Association for Perinatal Addiction Research and Education, about 1 out of every 10 newborns in the U.S. -- 375,000 a year -- is exposed in the womb to one or more illicit drugs. The article concluded with the observation that the best way to rescue a child is to rescue the mother as well.

Towards this end, I introduced a bill to fund six demonstration projects in which addicted mothers in residential treatment would be allowed to have their children with them. These treatment programs would target economically disadvantaged addicted women and their children and would offer primary health care, child care, parenting and job skills, nutrition, and health social, education, and employment services with follow-up services after discharge. The idea is to maximize successful treatment, keep families together, and prevent substance abuse in the second and third generations. Based on your professional experience in this area, do you support this approach? What else can we or should we be doing to salvage families damaged or destroyed by parental drug addiction?

### Response

Based on my professional opinion, which reflects my current experiences and review of research and literature, I concur with the proposal to provide family-centered treatment to addicted mothers and their families. The concept of family-based intervention in any form is crucial to early intervention, prevention and treatment of substance abuse. Another area for consideration to salvage and support families impacted upon by drug addiction is environmental intervention across generations. This proposition would reflect multigenerational supports to members of the extended family, biological or surrogate, who assume the role of primary care givers. I would propose the introduction of legislation to fund demonstration projects in education which could tap into school-based supports and community resources which provide direct supports to children and their current care givers in the context of an educational setting within the community in which the children reside. These supports would include a cadre of community outreach interventionists who would provide assistance within the context of the community in which these women live. The movement of these supports in closer proximity to the natural environment may have a stronger impact in terms of a cultural and social context.

The CHAIRMAN. I would ask, in conclusion, whether or not there is anything each of you would like to say in closing about this problem or about anything that has been mentioned here today.

Dr. POWELL. Well, I would like to say that I really hope that there will be funds made available. I realize that these are very, very tight times economically, but working with and seeing these children on a regular basis, I really believe that there is hope for these children and there are people out there that are doing a lot of hard, very good work with them and their families.

It is so important to understand that these are our children and they are a very, very valuable resource, and they are children first and they have the right to a full and appropriate, free public education. So I would like to see them stay to the degree possible, as I have said, within the mainstream and have the special supports that they need to keep them there, to any degree that is possible.

Dr. DAVIS. I have to agree 100 percent. I think if I had a couple of things to say, they would boil down to this. No. 1, I think we continually have to educate the public as to the neurological and biological effects of the drug. That is still controversial in the field, and you may not be aware of it, but some of our colleagues, as Judy and I often talk about it, continue to raise issues as to whether or not the drug absolutely does something to the fetus.

The CHAIRMAN. I had the AMA before me, the American Medical Association, seeking their help 6 years ago, then 5 years ago, then 3 years ago, saying please help, come and testify and tell us about the dangers of cocaine consumption.

As of 2 years ago, the AMA's official position—apparently, it has not changed—on cocaine is that it is not addictive. Now, the message that that sends to every American out there is—and when I go on college campuses and high schools and schools and say, hey, it is a problem, believe me, I promise you there is always at least one kid, and usually more, that stands up either able to quote or with document in hand reading the AMA's position.

So I am painfully aware, Dr. Davis, that not only are some of your colleagues who specialize in disagreement, but the official organ of America's physicians says it is not that big a deal—that is not fair; they don't say not that a big deal. They say they will not take an official position relative to its addictive impact, psychological or physiological.

Anyway, go ahead. I didn't mean to interrupt you.

Dr. DAVIS. I guess the final statement would agree with what Dr. Powell said, and that is we have to say it is not a lost generation. I mean, if we have large cities documenting anywhere from 25 to 50 percent of youngsters being born perinatally exposed to cocaine now—if we are talking about numbers like that and if we give up on them, we might as well give up on our future.

So I think every single bit of effort that we can bring to the forefront has to be used. It may not be money alone. I think a lot of it has to be creativity and working with families, working with foster parents, working with grandparents. Sometimes it really doesn't involve the whole expenditure of money, but it involves an expenditure of time and commitment and effort.

I think that is what we are doing at the hospital today. I certainly don't get any payment for working with this school program. It

involves night-time work, it involves weekend work because we are still putting it together, but we are doing it, and I think we still have to bring to the forefront the need for hope and the need for putting forth a greater effort.

The CHAIRMAN. Well, Doctor, you gave yourself away when you said you were raised in Harlem and still there. You are obviously an unusual person. I am not being facetious when I say that. It is hard to keep people in the position of doing the things that you do.

I might add, by the way, that I will make a prediction to you. We are going to find that this problem on a percentage basis is equally as acute in rural America as it is in the center cities. That is why in this drug strategy that I proposed, I proposed a rural drug initiative. We have evidence already that it is as bad. No one wants to talk about that; it is as if it didn't happen because that is somewhere out there.

Dr. Howard.

Dr. HOWARD. I would just like to close in the role of a citizen of this great nation of ours in saying that I am an optimist by my nature, and I feel that if we can combine the public funds that come through the budget that Congress approves, and if we can combine our private funds and we can begin to develop educational programs that really serve the children as a whole person—and I mean after-school programs where they can take band and music and choir, and have tutors available and highlight areas where there are more high-risk children—I really feel in a partnership that way we can make a big difference. I feel very strongly about that.

The CHAIRMAN. Well, I do, too. I believe we can. I had an opportunity to spend about 7 months with some of your medical colleagues. I didn't volunteer to do it, but I did, and one of the neurosurgeons with whom I was dealing was explaining to me the debate relative to aneurysms and their genesis, and so on and so forth.

I had just come out of the hospital after having one operation and the press asked me, since, as you physicians know, I believe it is 20 percent of all of us who have one have a mirror aneurysm on the opposite—I was one of those lucky ones, and I walked out of the hospital and said when the press was there, after having refused to—not refused to; I mean, there wasn't any ability to deal with them for about 2 months and the rumors were rampant about my condition.

Between operations, I left the hospital and had on a baseball cap to cover up my head that looked like a runway at the time. They said, oh, you have another one coming up, Senator. What about that? I said, oh, don't worry; I said it is a piece of cake. And, apparently, that was what was put on the national news.

My neurosurgeon, whom we all think when they are successful, but I believe this to be the case anyway, is one of the great ones in the country, apparently received a number of calls from his colleagues from all around the country saying, in effect, why would you dare tell him that a second craniotomy is a piece of cake.

And so as I was getting ready for the second one, he, with some frustration, asked me why would I dare say that, that it was a piece of cake, explaining to me that he had received these calls. And this was in the context of also a team of young neurosurgical

interns who were there, explaining the issue about the genesis of aneurysms.

He said in frustration, do you know what your problem is, Biden? I thought I knew, but I said, no, Doctor. He said your problem is you are a congenital optimist, and I am. I am a congenital optimist, but I want to make the case as strongly as I can that I believe that it is incredibly urgent, it is even more necessary than anyone thinks now at this moment to do something about those mothers who are addicted and becoming pregnant, and, once pregnant, dealing with their continued consumption during pregnancy, and that it will be considerably cheaper, and I would argue it will be politically easier to provide that money than the difficulty we are going to face—you already facing, you are already dealing with, and successfully dealing with.

It is going to be harder politically to sustain over the long period of time which is going to be required the kind of regimes and strategies that are needed and that I support, and will continue to support, for these children. One is not at the exclusion of the other, but I think it is important that we change our attitude or change our rhetoric, one or the other, about what we are doing in terms of providing for treatment for mothers, and many of them who desperately want help while pregnant.

Your testimony has been extremely helpful. Dr. Powell, although it is, as I said, not my bailiwick, it is among my concerns. I am going to take you up on your offer to take a look at your program, and to the extent that you can continue and are willing to do what you do, we thank you very, very much. I just hope that more help will be on the way, but ultimately the funding for all of what you are talking about is local funding. That is where the cost is.

Even in the good old days when we funded education before, God bless him, President Reagan came along, we were only funding, I believe, 14 percent, if my memory serves me, of all the educational needs in America at a Federal level. With President Reagan, I think that went down—I will leave the record open to correct this if I am wrong—but I think it went down to 7 percent. I may be mistaken about that, but even then it was only 14 percent. And so local communities that are strapped are going to have to have some help.

Again, thank you very, very much. I can't tell you how much we appreciate your willingness to be here, and especially you, Dr. Howard, not because of any reason other than the fact that you came all the way from Los Angeles. I hope you didn't have to take the redeye. Thank you all again.

This hearing is adjourned.

[Whereupon, at 12:50 p.m., the committee was adjourned.]

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